File #:

29013

Owner's Name: Landco, LLC dba Tom Thumb

Convenience Store

Agent:

Douglas Landsea

Type of Application: Major Conditional Use

Key:

Key Largo MM 104.7

RE:

00508260-000000





County of Monroe Growth Management Division

Planning & Environmental Resources Department

2798 Overseas Highway, Suite 410 Marathon, FL 33050

Voice: (305) 289-2500 FAX: (305) 289-2536



Board of County Commissioners

Mayor George Neugent, Dist. 2 Mayor Pro Tem Sylvia J. Murphy, Dist. 5 Kim Wigington, Dist. 1 Heather Carruthers, Dist. 3 Mario Di Gennaro, Dist. 4

We strive to be caring, professional and fair

Date: 1/29/01

Time: 1:55 10

Dear Applicant:

This is to acknowledge submittal of your application for M. Cond USC

Type of application

d CO/ToMThunb to the Monroe County Planning Department.

We are unable at this time to issue a receipt of your application, as it will take our staff two working days to determine that all required materials related to your application have been submitted. All applications received after 12:00 Noon will be considered as submitted the following working day.

Also, as required by Monroe County Code, planning staff will review your application after acceptance, to deem it complete within an additional fifteen working days.

MONROE CO. PLANNING DEPT.

Thank you.

Planning Staff

MONROE COUNTY PLANNING & ENVIRONMENTAL RESOURCES DEPARTMENT



Request for a Major Conditional Use Permit / Amendment to a Major Conditional Use Permit

Monroe County Code §§ 9.5-69 & 9.5-73

An application must be deemed complete and in compliance with the Monroe County Code by the Staff prior to the item being scheduled for review

Major Conditional Use Permit Application Fee: \$10,014.00

In addition to the application fee, the following fees also apply:

Advertising Costs: \$245.00

Surrounding Property Owner Notification: \$3.00 for each property owner required to be noticed Technology Fee: \$20.00

Date of Submittal: / / / / Year	
Month Day Year	
Property Owner:	Agent (if applicable):
Landro, UC	Douglas Landsea
Name OT West occacholace &	Name 8807 SW 153 Terroce
Hovean, FL 23010	MICMI, PL 33157
Mailing Address (Street, City, State, Zip Code)	Mailing Address (Street, City, State, Zip Code)
305-885-5451	305-29 B-10 22
Daytime Phone	Daytime Phone
THECCUTTY & tonthumbofl	com Dlandsea & hotmail.com Email Address
Diffati Fidal 655	Email Address
Legal Description of Property:	
(If in metes and bounds, attach legal description of	n separate sheet)
1360K 1 LOTS 1-5 and 36-3	sq Largo city Key Largo
Block Lot S	ubdivision Key
00508260-00000	1103535
Real Estate (RE) Number	Iternate Key Number
104701 overseas Hwy	104.7
Street Address (Street, City, State, Zip Code)	pproximate Mile Marker

Land	Use District Designation(s): SUB URBAN Commercial (SC)
Prese	ent Land Use of the Property: SUB URBEN Commercia (SC)
Prop	osed Land Use of the Property: SUB URBIN Commercial (Sc)
Tota	Land Area: 44,166 \$ (1.01 acres)
If no	n-residential or commercial floor area is proposed, please provide:
	Total number of non-residential buildings + 2 comples
	2824 Total non-residential floor area in square feet + Canopy #1 1536 #
If res	sidential dwelling units are proposed, please provide: Canopy #2 2,120 \$
	Total number of residential buildings
	Total number of permanent, market-rate units
	Total number of permanent, affordable / employee housing units
	Total number of transient units (hotel rooms, recreational vehicle / campground spaces)
All of	f the following must be submitted in order to have a complete application submittal: se check as you attach each required item to the application)
X	Complete major conditional use permit application (unaltered and unbound);
X	Correct fee (check or money order to Monroe County Planning & Environmental Resources);
Image: second control of the control of	Proof of ownership (i.e. Warranty Deed);
Image: second content of the content of	Current Property Record Card(s) from the Monroe County Property Appraiser;
	Location map;
	Photograph(s) of site from adjacent roadway(s);
X	Signed and Sealed Boundary Survey, prepared by a Florida registered surveyor – sixteen (16) sets (at a minimum, survey should include elevations; location and dimensions of all existing structures, paved areas and utility structures; all bodies of water on the site and adjacent to the site; total acreage by land use district; and total acreage by habitat);
X	Written description of project;
図	Environmental Designation Survey (prepared in accordance with Monroe County Code §9.5-69(a)(2);
X X	Community Impact Statement (prepared in accordance with Monroe County Code §9.5-69(a)(2);
X	Signed and Sealed Site Plan, prepared by a Florida registered architect, engineer or landscape architect—sixteen (16) sets (drawn to a scale of 1 inch equals 20 feet, except where impractical and the Director of Planning authorizes a different scale). At a minimum, the site plan should include the following:

П	Date, north point and graphic scale; Boundary lines of site, including all property lines and mean high-water lines; Land use district of site and any adjacent land use districts; Flood zones pursuant to the Flood Insurance Rate Map(s); Locations and dimensions of all existing and proposed structures and drives; Type of ground cover (i.e. concrete, asphalt, grass, rock); Adjacent roadways; Setbacks as required by the land development regulations; Location and dimensions of all parking spaces (including handicap accessible, bicycle and scooter) and loading zones; Calculations for open space ratios, floor area ratios, residential density and parking; Location and type of outdoor lighting; Extent and area of wetlands, open space areas and landscape areas; Location of solid waste storage; Location of sewage treatment facilities; Location of existing and proposed fire hydrants or fire wells;
<u></u>	Floor Plans for all proposed structures and for any existing structures to be redeveloped – sixteen (16) sets (drawn at an appropriate standard architectural scale and including handicap accessibility features); NA:
	Elevations for all proposed structures and for any existing structures to be modified – sixteen (16) sets (with the elevations of the following features referenced to NGVD: existing grade; finished grade; finished floor elevations (lowest supporting beam for V-zone development); roofline; and highest point of the structure);
×	Landscape Plan by a Florida registered landscape architect – sixteen (16) sets (may be shown on the site plan; however, if a separate plan, must drawn to a scale of 1 inch equals 20 feet, except where mpractical and the Director of Planning authorizes a different scale). At a minimum, the landscaping plan should include the following:
	 Date, north point and graphic scale; Boundary lines of site, including all property lines and mean high-water lines; Locations and dimensions of all existing and proposed structures and drives; Open space preservation areas; Existing natural features; Size and type of buffer yards including the species, size and number of plants; Parking lot landscaping including the species, size and number of plants; Specimen trees, or threatened and endangered plants to be retained and those to be relocated or replaced; Transplantation plan (if required);
X	Conceptual Drainage Plan - sixteen (16) sets (with drainage calculations; existing and proposed opography; all drainage structures; retention areas; drainage swales; and existing and proposed permeable and impermeable areas;
X	Fraffic Study, prepared by a licensed traffic engineer;
X	Construction Management Plan, stating how impacts on near shore water and surrounding property will be managed (i.e. construction barriers, hay bales, flagging);
X	Typed name and address mailing labels of all property owners within a 300 foot radius of the property. This list should be compiled from the current tax rolls of the Monroe County Property Appraiser. In the event that a condominium development is within the 300 foot radius, each unit owner nust be included;

\bowtie	Letters of Coordination are required from the following:
	Florida Keys Aqueduct Authority (FKAA); Florida Keys Electric Cooperative (FKEC) or Keys Energy Services; Monroe County Office of the Fire Marshal; Monroe County Engineering Division; Monroe County Health Department; Monroe County Solid Waste Management; Florida Department of Health if wastewater flows are less than or equal to 5,000 gallons per day or Florida Department of Environmental Protection if wastewater flows exceed 5,000 gallons per day;
If ap	plicable, the following must be submitted in order to have a complete application submittal:
	Notarized Agent Authorization Letter (note: authorization is needed from all owner(s) of the subject property)
	Vegetation Survey or Habitat Evaluation Index (please contact Monroe County Environmental Resources prior to application submittal to determine if this documentation is necessary)
	Construction Phasing Plan
M	Additional Letters of Coordination may be required for your project, please contact with the Planning & Environmental Resources Department to identify other agencies expected to review the project. Other agencies may include, but are not limited to:
	 □ Key Largo Wastewater Treatment District (KLWTD) □ South Florida Water Management District (SFWMD) ☑ Florida Department of Transportation (FDOT) □ Florida Department of Environmental Protection (FDEP) □ Florida Department of State, Division of Historic Resources □ Florida Game and Freshwater Fish Commission (FGFFC) □ U.S. Army Corps of Engineers (ACOE) □ U.S. Fish and Wildlife Service (USFW)
	med necessary to complete a full review of the application, the Planning & Environmental Resources rement reserves the right to request additional information.
I certi	ify that I am familiar with the information contained in this application, and that to the best of my knowledge such information is true, complete and accurate.
Signa	ture of Applicant: JAMES MoCARTHY IVI
Sworn	a before me this day of JANUARY, 2009
	SANDRA ISHAM MY COMMISSION # DD 717664 EXPIRES: October 31, 2011 Bonded Thru Notary Public Underwriters ANDRA ISHAM Notary Public My Commission Expires

Please send the complete application package to the Monroe County Planning & Environmental Resources Department, Marathon Government Center, 2798 Overseas Highway, Suite 400, Marathon, FL 33050.

This Instrument Prepared by:

Doc# 1674241 12/12/2007 9:52AM Filed & Recorded in Official Records of MONROE COUNTY DANNY L. KOLHAGE

Gavin Williams, Esq. Holland & Knight, LLP 701 Brickell Avenue, Suite 3000 Miami, Florida 33131

12/12/2007 9:52AM DEED DOC STAMP CL: PW

\$0.70

Doc# 1674241 Bk# 2335 Pg# 2429

AK#: 1627593 Store No. 226

STATUTORY WARRANTY DEED

THIS STATUTORY WARRANTY DEED, made as of this 28th day of February, 2007, between TOM THUMB FOOD STORES, INC., a Florida corporation, whose principal address is 97 West Okeechobee Road, Hialeah, Florida 33010 (hereinafter called the "Grantor"), and LANDCO, LLC, a Florida limited liability company, whose address is 97 West Okeechobee Road, Hialeah, Florida 33010 (hereinafter called the "Grantee"),

WITNESSETH, that Grantor, for and in consideration of the sum of Ten Dollars (\$10.00), and other good and valuable consideration to Grantor in hand paid by Grantee, receipt of which is hereby acknowledged, has granted, bargained and sold to Grantee, and Grantee's heirs, successors and assigns forever, the following described land, situated, lying and being in Monroe County, Florida, to wit:

Lots 1, 2, 3, 4, 5, 36, 37, 38 and 39, Block 1, LARGO CITY, according to the Plat thereof, as recorded in Plat Book 4, at Page 142, of Public Records of Monroe County, Florida, together with the improvements thereon.

This conveyance is made subject to the following:

- Taxes and assessments for the year 2007 and subsequent years.
- Zoning and other governmental regulations.
- 3. Subject to one (1) open mortgage in the original principal amount of \$800,000.
- 4. Conditions, restrictions, limitations and easements of record, if any, none of which are intended to be reimposed by this conveyance.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the Grantor does hereby fully warrant the title to said Property and will defend the same against the lawful claims of all persons whomsoever.

Doc' 1674241 Bkt 335 Pg# 2430

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed, and delivered in the presence of:

TOM THUMB FOOD STORES, INC. a Florida corporation

Name: | XIII

Joseph D. O'Connor

Name: James A. McCarthy, Jr.

Title: President

Name: Sandu Sham Print name: Sandra Isham

STATE OF FLORIDA

SS:

COUNTY OF MIAMI-DADE

My Commission Expires

Notary Public Name: NA Cleve FMer

CHARLENE F. MEZYK
Notary Public - State of Fiorida
MyCommission Exples Dec 3, 2008
Commission # DD 366107
Bonded By National Notary Assn.

4229568_v1

MONROE COUNTY OFFICIAL RECORDS

Monfoe County Property Record Card (017	County P	rope	erty	Reco	rd C	ard	017)				₹ 10	ternate fective	Key: Date:	Alternate Key: 1627593 Effective Date: 1/6/2009 10:43:58 AM	3 9 10:43:	58 AM	Roll Year 2009 Run: 01/06/2009 10:44 AM	19 109 10:44 AM
LANDCO LLC 97 WEST OKEECHC HIALEAH FL 33010	LANDCO LLC 97 WEST OKEECHOBEE RD HIALEAH FL 33010	۵.									Parcel 00508260-000000-12-61-39 Nbhd 10020 Alt Key 1627593 Mill Group 500 Affordable Housing No PC 2600 Inspect Date Next Review Business Name TOM THUMB Physical Addr 104701 OVERSEAS HWY, KEY LARGO	08260-0 7593 Housing 6 ame TC	00000-1 I No IM THUI	2-61-39 MB /ERSEA\$	Milli PC Nex	Nbhd 10020 MIII Group 500K PC 2600 Next Review Y, KEY LARGO	Э	
Associated Names Name LANDCO L.L.C,	Names				DBA						Role							
Legal Description BLK 1 LTS 1 THRU OR2335-2429/2430	iption THRU 5 AND 9/2430	LOTS	36 TH!	RU 39 L	ARGO	CITY P	'B4-142	KEY LA	WGO C)R517-973 ()R1079-17	76D/C O	R1079-	1778 OR	1159-384	OR1164-;	Legal Description BLK 1 LTS 1 THRU 5 AND LOTS 36 THRU 39 LARGO CITY PB4-142 KEY LARGO OR517-973 OR1079-1776D/C OR1079-1778 OR1159-384 OR1164-2017/18AFF OR1249-887/88 OR2335-2429/2430	9-887/88
Land Data Line ID 68370	1. Use Fro	Front Depth Notes	epth No	Notes	4	# Units 44,427.00	ts Type		SOH %	Rate	Depth 1.00	Depth Loc 1.00 1.00		Phys	Class	R0G0	Shp Phys Class ROGO Class Value 0.75 1.00 N	Just Value

Total Just Value

Monroe County Property Record Card (017) Building Sketch 43537

Alternate Key: 1627593 Effective Date: 1/6/2009 10:43:58 AM

Roll Year 2009 Run: 01/06/2009 10:44 AM

48 ET.		RA 2424 - 196
22 FA 17 FE.	09F 645 - 215	1000

:						RCN		
8 0.00 1 0.00		% ноѕ	0.00	0.00		Area % Wall Rate	100.00	
Functional Obs Economic Obs		Sketch ID S	005	003		YDe		
196 0.08 1989		Area	645	2,424	Exterior Finish	Ext Nbr Wall Type	4893 C.B.S.	
Perimeter Depreclation % C	0 4	% Finished				Total RCN		₽ L
4 G X	7 Flx Bath 0 Extra Flx 4	Year Bullt	1995	1995		Sprinkler A\C		> Z
Building Type 0 Condition A Quality Grade 350	5 Flx Bath 0 6 Flx Bath 0	Wall Height # Stories	-	13 1		Area % S	100.00	100.00
s	3 Flx Bath 0	Number Wall He				escription	NO VALUE	1 STY STORE-A
Bullding Characteristics Bullding Nbr 1 Effective Age 7 Gmd Floor Area 2424	Fireplaces 0 2 Fix Bath 0	Sections Type Nur	OPF 1	FLA 2	Interior Finish	Sec Nbr Int Nbr Description	Ž ~	1 1

Monroe County Property Record Card (017)

Roll Year 2009 Run: 01/06/2009 10:44 AM

Alternate Key: 1627593 Effective Date: 1/6/2009 10:43:58 AM

Miscella	Miscellaneous improvements	rements										
Nor	Impr Type	8	# Units Type	i	SOH % Length	Width	Width Year Built	Roll Year Grade	Grade	Life	RCN	Depr Value
7	CC2:CON	CC2:COM CANOPY	1,152 SF	0.00	48	24	24 1999	2000	4	40		
-	AP2:ASPI	AP2:ASPHALT PAVING	19,250 SF	0.00	0	0	1988	1989	2	25		
										Total Depreclated Value	ated Value	
Appraiser Notes	r Notes											
RE 5082	7 THRU 50830	RE 50827 THRU 50830 & 50861 THRU 50864 COMBINED FOR ASSESSING PURPOSES 7-17-90JMH	OMBINED FOR	ASSESSI	VG PURPOSES	7-17-90JA	#					
TOM THE	UMB TPP 85(TOM THUMB TPP 8502885 - TOM THUMB STORE #206	DRE #206									
Building Permits	Permits											
Bldg	Number	Number Date Issued	Date Completed	npleted		Amount C	Amount Description		2	Notes		
	9931215	9931215 Jul 2 1999 12:00AM	Dec 14 1999	999 12:00AM	>	-			O	CANOPY OVER GAS PUMPS	SAS PUMPS	

Monroe County Property Record Card (017)

Roll Year 2009 Run: 01/06/2009 10:44 AM

Alternate Key: 1627593 Effective Date: 1/6/2009 10:43:58 AM

Tax Year Year Juel Land Chan Land Chan Land Building Withort Juel Land Exempted Year Juel Land Exempted Year A 1,665 R07	Value History	tory									
C 1,166,209 0 265,697 39,901 1,468,807 1,468,807 1,468,807 0 C 7,10,832 0 180,807 41,237 89,1521 931,521 0 C 533,124 0 188,789 41,237 765,899 765,899 0 C 533,124 0 188,789 41,267 765,899 765,899 0 C 533,124 0 189,837 44,280 765,899 766,899 0 C 533,124 190,837 44,280 766,899 766,899 0 C 222,582 27,486 190,837 44,280 766,899 766,899 0 C 222,582 27,436 12,705 509,643 506,643 0 C 222,552 27,4366 12,705 509,643 506,643 0 C 222,552 162,295 27,436 12,705 509,643 420,240 0 C 222,552	Tax Year	- 1	Just Land	Class Land	Building	Misc	Just	Assessed Value	Exempt	Sr Ex	Tax Value
C 710,832 0 180,807 39,762 931,521 931,521 0 C 710,832 0 183,79 40,370 939,971 939,971 0 C 533,124 0 183,79 41,281 785,144 783,144 0 C 533,124 190,897 41,281 786,321 786,321 0 C 533,124 190,897 46,887 770,448 770,448 0 C 533,124 190,897 46,887 770,448 770,448 0 C 222,562 274,386 224,138 526,076 526,076 0 C 222,562 182,923 27,826 43,274 43,274 43,087 0 C 222,562 182,923 28,796 43,274 43,087 0 C 222,562 186,295 30,186 43,274 43,087 0 C 222,562 166,295 32,786 43,274 420,271 <	2008F	ပ	1,166,209	0	263,697	38,901	1,468,807	1,468,807	0	z	1,468,807
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	1982F	O	3,738		0	0	3,738	3,738	0		3,738

Monroe County Property Record Card (017)

Run: 01/06/2009 10:44 AM

Roll Year 2009

Alternate Key: 1627593 Effective Date: 1/6/2009 10:43:58 AM

Book Page Sale Date Instrument Transfer Code Q/ U Vacant Sale 1079 1778 1/1/1989 Warranty Deed 0 M V 1159 384 2/1/1991 Warranty Deed 0 U I 1249 887 1/1/1993 Warranty Deed 0 U I								
Page Sale Date Instrument Transfer Code Q/ U Vacant 1778 1/1/1989 Warranty Deed 0 M V 384 2/1/1991 Warranty Deed 0 U I 887 1/1/1993 Warranty Deed 0 U I	Sales Hist	tory						
1778 1/1/1989 Warranty Deed 0 M V 384 2/1/1991 Warranty Deed 0 U I 887 1/1/1993 Warranty Deed 0 U I	Book	Page	Sale Date	Instrument	Transfer Code	o O	Vacant	Sale Price
384 2/1/1991 887 1/1/1993	1079	1778	1/1/1989	Warranty Deed	0	Σ	>	237.500
V 1/1/1993	1159	384	2/1/1991	Warranty Deed	0	ם		738.000
	1249	887	1/1/1993	Warranty Deed	0	ם	-	735,000

TOM THUMB FOOD STORE, INC.

RE# 00508260-000000

MILE MARKER 104.7

Project Description

This property is owned by LANDCO, LLC and operated under the name of Tom Thumb Food Stores, Inc. Located at 104701 Overseas Hwy., Key Largo, FL. The property consists of 44,166 sq. ft. (1.013 Acres) of total land area and has a zoning classification of Sub Urban Commercial (SC). Located on the property and currently operating is a 2,824 sq. ft. enclosed convenience store and a 1,152 sq. ft. canopy over two (2) fuel pumps.

The proposed expansion project will include the demolition of the canopy that covers the existing fuel pumps and the construction of two (2) new canopies of 1,536 sq. ft. and 2,120 sq. ft. to cover the relocation of the existing fuel pumps and four (4) additional fuel pumps. The final expansion will have a total of six (6) fuel pumps and a retro fit/ upgrade to the convenience store.

Expansion of the facility may be accomplished in two phases depending on the availability of NROGO square footage credits to build the canopy over the fueling pumps. It is anticipated that upon approval of the Major Conditional Use Permit and issuance of NROGO credits, construction would begin within 45 days. Assuming that enough NROGO credits are available to build the entire canopy at a single time, the construction process can be accomplished in approximately 90 days. If there are not enough NROGO credits available to construct the canopy at one time, then the construction will be phased.

Also included in the expansion will be an upgrade of the landscaping and onsite traffic flow patterns. The expansion and upgrades will include where ever possible, the use of energy efficient lighting and equipment and the uses of low flow restroom fixtures.

TOM THUMB FOOD STORE, INC.

(LANDCO, LLC.)

RE# 00508260.000000

MILE MARKER 104.7

Environmental Designation Survey

Not applicable: Property is scarified.

Sec. 9.5-69. Major conditional uses.

(a) Applications for Major Conditional Uses: An application for a major conditional use permit shall be submitted to the development review coordinator in a form provided by the director of planning.

(1) If approval of a plat is required for the proposed development, an application for plat approval shall be submitted in conjunction with the application for a conditional use permit. However, a major conditional use shall not become effective until the plat has been approved by the board of county commissioners.

PROPERTY IS PLATTED FOR CURRENT USE AND WILL BE REPLATTED IF NECESSARY.

- (2) As a part of the application for major conditional use, an applicant shall be required to submit the following, except for those inappropriate to the proposed development due to the limited size or scale of the development as determined by the planning director:
- a. An environmental designation survey consisting of:
- (i) A plan drawn to a scale of one (1) inch equals twenty (20) feet or less, except where impractical and the planning director authorizes a smaller scale, and showing the following:
- 1. Location of property; 104701 OVERSEAS HWY., KEY LARGO, FL
- 2. Date, approximate north point and graphic scale; INCLUDED ON PROPERTY SURVEY (SEE ATTACHED)
- 3. Acreage within the property; 44,166 SQ.FT. (1.013 ACRES) INCLUDED ON PROPERTY SURVEY (SEE ATTACHED)
- 4. Boundary lines of the property and their bearings and distances; INCLUDED ON PROPERTY SURVEY (SEE ATTACHED)
- 5. Topography and typical ground cover; 0.49 ACRES DEVELOPED AND IN USE, 0.51 ACRES ARE CLEARED AND SCARIFIED
- 6. General surface characteristics, water areas and drainage patterns; INCLUDED ON PROPERTY SURVEY AND CIVIL DRAWINGS
- 7. Contours at an interval of not greater than one (1) foot or at lesser intervals if deemed necessary for review purposes; AVAILABLE IF DEEMED NECESSARY
- 8. 100-year flood-prone areas by flood zone; FEDERAL FLOOD ZONE X
- Presently developed and/or already altered areas; and INCLUDED ON PROPERTY SURVEY
- 10. Location of mean high-water line. NA
- (ii) A natural vegetation map and/or a map of unique environmental features such as:

- 1. Climax tropical hardwood hammocks; NA: SCARIFIED OPEN AREA
- 2. Endangered species habitats; NA: SCARIFIED OPEN AREA
- 3. Major wildlife intensive use areas. NA: SCARIFIED OPEN AREA
- (iii) Aerial photographs of the property and surrounding area. (SEE ATTECHED)
- (iv) A review of historical and archeological sites by the Florida Division of Archives, History and Records Management.
- (v) A review of unique environmental features such as:
- 1. Climax tropical hardwood hammocks; NA: SCARIFIED OPEN AREA
- 2. Endangered species habitats; NA: SCARIFIED OPEN AREA
- 3. Major wildlife intensive use areas.
- (vi) Actual acreage of specific vegetation species or other environmental characteristics. NA: SCARIFIED OPEN AREA
- (vii) General information relating to the property in regard to the potential impact which development of the site could have on the area's natural environment and ecology NA: SCARIFIED OPEN AREA
- (viii) Environmental resources:
- 1. If shoreline zones were identified, describe in detail any proposed site alterations in the areas, including vegetation removal, dredging, canals or channels; identify measures which have been taken to protect the natural, biological functions of vegetation within this area such as shoreline stabilization, wildlife and marine habitat, marine productivity and water quality maintenance.

 NA
- 2. If tropical hammock communities or other protected vegetative communities were identified, describe proposed site alteration in those areas and indicate measures which were taken to protect intact areas prior to, during and after construction. NA: SCARIFIED OPEN AREA
- 3. Describe plans for vegetation and landscaping of cleared sites including a completion schedule for such work. **SEE ATTACHED LANDSPACE PLANS**
- (ix) Environmental resources-wildlife. Describe the wildlife species which nest, feed or reside on or adjacent to the proposed site. Specifically identify those species considered to be threatened or endangered NA: SCARIFIED OPEN AREA

Indicate measures which will be taken to protect wildlife and their habitats. ALL NECESSARY MEASURES WILL BE TAKEN TO ENSURE MINIMAL DISTURBANCE TO ADJOINING PROPERY

(x) Environmental resources-water quality:

- 1. Identify any waste water disposal areas, including stormwater runoff, septic tank drain-fields, impervious surfaces and construction-related runoff; describe anticipated volume and characteristics. Indicate measures taken to minimize the adverse impacts of these potential pollution sources upon the quality of the receiving waters prior to, during, and after construction; identify the nearshore water quality; and identify how this development will not adversely impact the nearshore water quality. PLEASE SEE ATTACHED CIVIL PLANS REGARDING STORM WATER MANAGEMENT PLAN
- 2. Indicate the degree to which any natural drainage patterns have been incorporated into the drainage system of the project. NO KNOWN DRAINAGE PATTERS EXIST. STORM WATER RUNOFF WILL BE HANDLED ACCORDING TO THE STORM WATER MANAGEMENT PLAN
- b. A community impact statement, including:
- (i) General description of proposed development:
- 1. Provide a general written description of the proposed development; include in this description the proposed phases of development or operation and facility utilization, target dates for each of these, and date of completion; in addition, indicate the site size, developing staging and appropriate descriptive measures such as quantity and type of residential units, commercial floor area, tourist accommodation units, seating and parking capacities; for residential development, indicate the anticipated unit-per-acre density of the completed project; PLEASE SEE ATTACHED PROJECT NARRATIVE
- 2. Identify aspects of the project design, such as a clustering, which were incorporated to reduce public facilities costs and improve the scenic quality of the development; describe building and siting specifications which were utilized to reduce hurricane and fire damage potential to comply with federal flood insurance regulations and the comprehensive land use plan. THE DESIGN OF THE EXPANSION IS VERY SIMILAR TO A TYPICAL CONVENIENCE STORE & GAS STATION. THE NEW CANOPY OVER THE FUEL PUMPS WILL BE UP TO CURRENT BUILDING CODE SO AS TO AVOID DAMAGE DURING A HURRICANE. NEW ONSITE TRAFFIC PATTERNS WILL ALLOW FOR GREATER ACCESSIBILTY BY VEHICULAR TRAFFIC, THEREBY MINIMIZING OVERFLOW INTO ROADWAY TRAFFIC. THE CONVENIENCE STORE WILL BE UPGRADED AND MODERNIZED SO AS TO REFLECT THE COMPANY'S PROFESSIONAL IMAGE
- (ii) Impact assessment on public facilities and water supply:
- 1. Identify projected daily potable water demands at the end of each development phase and specify any consumption rates which have been assumed for the projection; **EXPANSION PLANS WILL HAVE NEGLIGIBLE IMPACT OVER AND ABOVE CURRENT USE AND MAY EVEN DECREASE WITH THE INSTALLATION OF LOW-FLOW FIXTURES IN THE RESTROOMS.**
- 2. Provide proof of coordination with the Florida Keys Aqueduct Authority; assess the present and projected capacity of the water supply system and the ability of such system to provide adequate water for the proposed development; PLEASE SEE ATTACHED "LETTER OF

COORDINATION"

- 3. Describe measures to ensure that water pressure and flow will be adequate for fire protection for the type of construction proposed. THE EXPANSION PLANS AND SUBSIQUENT CONSTRUCTION WILL NOT IMPACT CURRENT WATER PRESSURE AND FLOW
- (iii) Public facilities-wastewater management:
- 1. Provide proof of coordination with the Florida Department of Health and Rehabilitative Services; PLEASE SEE ATTACHED "LETTER OF COORDINATION"
- 2. Provide projection of the average flows of wastewater generated by the development at the end of each development phase; describe proposed treatment system, method and degree of treatment, quality of effluent, and location of effluent and sludge disposal areas; identify method and responsibilities for operation and maintenance of facilities; EXPANSION OF THIS FACILITY WILL HAVE NEGLIGABLE IMPACT OVER AND ABOVE CURRENT DISCHARGE OF WASTEWATER FLOW AND MAY EVEN DECREASE WITH THE INSTALATION OF LOW FLOW FIXTURES IN THE RESTROOMS.
- 3. If public facilities are to be utilized, provide proof of coordination with the Monroe County Waste Collection and Disposal District; assess the present and projected capacity of the treatment and transmission facilities and the ability of such facilities to provide adequate service to the proposed development; CONVENIENCE STORE CURRENTLY HAS A SEPTIC TANK AND DRAINFIELD. NO PUBLIC FACILITIES ARE UTILIZED FOR DISPOSAL OF WASTE WATER
- 4. If applicable, provide a description of the volume and characteristics of any industrial or other effluents. BUSINESS DOES NOT DISCHARGE ANY INDUSTRIAL EFFLUENTS
- (iv) Public facilities-solid waste:
- 1. Identify projected average daily volumes of solid waste generated by the development at the end of each phase; indicate proposed methods of treatment and disposal; CURRENTLY THE BUSINESS CONTRACTS WITH A VENDOR FOR SOLID WASTE DISPOSAL. DUE TO THE NATURE OF THE EXPANSION, WE DO NOT ESTIMATE ANY SUBSTANTIAL INCREASE IN SOLID WASTE.
- 2. Provide proof of coordination with Monroe County Municipal Services District; assess the present and projected capacity of the solid waste treatment and disposal system and the ability of such facilities to provide adequate services to the proposed development; PLEASE SEE ATTACHED LETTERS OF COORDINATION
- 3. Comply with the requirements of section 9.5-426 of this chapter concerning any applicable traffic study. PLEASE SEE ATTACHED TRAFFIC ANALYSIS
- (v) Public facilities-transportation:
- 1. Provide a projection of the expected vehicle trip generation at the completion of each development phase; describe in terms of external trip generation and average daily and peak hour

traffic; SEE TRAFFIC ANALYSIS, THE LEVEL III TRAFFIC STUDY BY CROSSROADS ENGINEERING

2. If the project site is adjacent to U.S. 1, describe the measures, such as setbacks and access limitations, which have been incorporated into the project design to reduce impacts upon U.S. 1. SITE DESIGN FOR THE PROPOSED EXPANSION TAKES INTO CONSIDERATION ON-SITE TRAFFIC FLOW WHICH WILL HELP TO EASE INGRESS AND EGRESS TO THE PROPERTY, THERE BY MINIMIZING DISTURBANCE OF TRAFFIC FLOW ON US 1

(vi) Housing:

- 1. If the project includes residential development, provide breakdown of the proposed residential units by price range or rental range and type of unit such as single-family, duplex, townhouse, etc.; NA
- 2. If lots are to be sold without constructed dwelling units, indicate the number and percentage of such lots and the extent of improvements to be made prior to sale; NA
- 3. Assess the potential of the proposed development to meet local or regional housing needs; in particular, indicate any measures taken to provide low-and moderate-income housing. NA

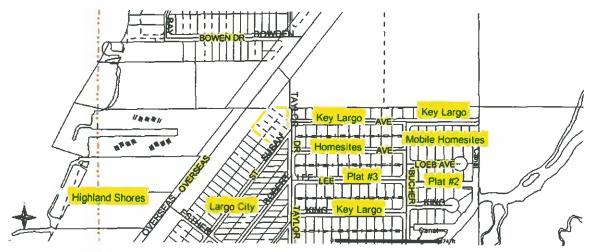
(vii) Special considerations:

- 1. Describe the relationship of the proposed development to the comprehensive land use plan objectives and policies; also indicate relationships [between] existing or proposed public facilities plans; identify any conflicts; PROPOSED EXPANSION FALLS WITHIN THE COMPREHENSIVE LAND USE PLAN OBJECTIVES AND POLICIES SINCE IT IS SIMPLY AN EXPANSION AND NOT THE CREATION OF A NEW DEVELOPMENT.
- 2. Indicate any relationships of the project to special land use and development district such as airport noise and hazard zones, solid or liquid waste treatment or disposal areas; LOCATION OF SUBJECT PROPERTY IS NOT WITHIN ANY SPECIAL LAND USE OR DEVELOPMENT DISTRICTS
- 3. If applicable, assess the impact of the proposed development upon other adjacent or nearby municipalities or counties. NA

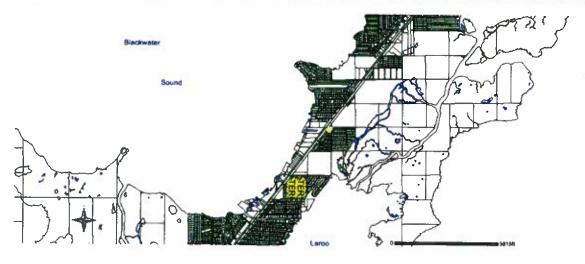
TOM THUMB CONVENIENCE STORE

RE# 00508260.000000

MILE MARKER 104.7







29013 LANDCO

TOM THUMB CONVENIENCE STORE

RE# 00508260.000000

MILE MARKER 104.7





29013 Land CO



MONROE COUNTY COMPREHENSIVE PLAN LAND

AUTHORITY

1200 TRUMAN AVE SUITE 207

KEY WEST, FL 33040

MONROE COUNTY COMPREHENSIVE PLAN LAND

AUTHORITY

1200 TRUMAN AVE STE 207

KEY WEST, FL 33040

PAGAN JOSEPH

PASEO DE LA ALHAMBRA 217

TORRIMAR, GUAYNABO 00966 PUERTO RICO

LANDCO LLC

97 WEST OKEECHOBEE RD

HIALEAH, FL 33010

SUBIRATS ALAIN

104500 OVERSEAS HWY UNIT A-102

KEY LARGO, FL 33037

HAWS LYLE C & J GAYLE

55995 CHANNEL VIEW DR

ELKHART, IN 46516

STONEMAN STEVEN G & NANCY L

411 LUTHER ROAD

APEX, NC 27502

DERRINGER TERRY A

104500 OVERSEAS HWY UNIT A204

KEY LARGO, FL 33037

SCHNEEBERGER DONALD G AND JULIE B

5133 ELMWOOD RD

COLGATE, WI 53017

THERIOT ROSLYN H TR 10/11/1999

104500 U S HIGHWAY 1 UNIT A-304

KEY LARGO, FL 33037

MONROE COUNTY COMPREHENSIVE PLAN LAND

AUTHORITY

1200 TRUMAN AVE SUITE 207

KEY WEST, FL 33040

JEMAR INVESTMENTS INC

P O BOX 1819

KEY LARGO, FL 33037

DAUGHTRY LUCILLE C TRUSTEE C/O NORTHERN TRUST, NA

700 BRICKELL AVE FL 10TH

MIAMI, FL 33131

HERRERA SERGIO O & BARBARA

12583 SW 79TH ST

MIAMI, FL 33183

ATKINSON WILSON CIII & KAY LANI

3381 N 36TH PLACE

HOLLYWOOD, FL 33021

KNOBLOCK HENRY M & BETSY

12051 SW 88 AVE

MIAMI, FL 33176

SHERRILL BYRON F AND MARIAN D TR 6/19/1995

PO BOX 2338

SILVERTHRONE, CO 80498

OLSON ROBERT L & LINDA K

925 CRYSTAL LAKE ROAD EAST

BURNSVILLE, MN 55306

COHEN JAMES M & JANET F

3900 GALT OCEAN DRIVE APT 2717

FT LAUDERDALE, FL 33308-6620

MYERS CAROLYN S

11758 WATERCREST LANE

BOCA RATON, FL 33498



COUNTY OF MONROE C/O BOARD OF COUNTY COMMISSIONERS

500 WHITEHEAD ST

KEY WEST, FL 33040

BEATTIE BRADFORD G

1 N BLACKWATER LN

KEY LARGO, FL 33037

CORN DONALD D & ANNA L

28476 ROYAL PALM DRIVE

PUNTA GORDA, FL 33982

CORN DONALD D & ANNA L

28476 ROYAL PALM DRIVE

PUNTA GORDA, FL 33982

TIITF C/O DEP

3900 COMMONWEALTH BLVD

TALLAHASSEE, FL 32399-3000

MONROE COUNTY COMPREHENSIVE PLAN LAND

AUTHORITY

1200 TRUMAN AVE STE 207

KEY WEST, FL 33040

TIITF C/O DEP

3900 COMMONWEALTH BLVD

TALLAHASSEE, FL 32399-3000

VAUGHN ROBERT R

P O BOX 464

TAVERNIER, FL 33070

VAUGHN ROBERT R

P O BOX 464

TAVERNIER, FL 33070

JEMAR INVESTMENTS INC

P O BOX 1819

KEY LARGO, FL 33037

TARAFDAR BENJAMIN

28 ROBERT ST

KEY LARGO, FL 33037

BEATTIE BRADFORD G

1 N BLACKWATER LANE

KEY LARGO, FL 33037

MONROE COUNTY C/O BOCC

1100 SIMONTON ST

KEY WEST, FL 33040

THIF C/O DEP

3900 COMMONWEALTH BLVD

TALLAHASSEE, FL 32399-3000

COUNTY OF MONROE C/O BOCC

1100 SIMONTON ST

KEY WEST, FL 33040

TIITF C/O DEP

3900 COMMONWEALTH BLVD

TALLAHASSEE, FL 32399-3000

VAUGHN ROBERT R

P O BOX 464

TAVERNIER, FL 33070

VAUGHN ROBERT R

P O BOX 464

TAVERNIER, FL 33070

JEMAR INVESTMENTS INC

PO BOX 1819

KEY LARGO, FL 33037

KLASFELD ILENE DR

1908 NW FOURTH AVE APT 112

BOCA RATON, FL 33432-1580



VASILIU LUCIA 202 RYAN AVE

KEY LARGO, FL 33037

LORENZO ALEIDA 280 LEISURE LN

BURNSVILLE, NC 28714

MONROE COUNTY

500 WHITEHEAD STREET

KEY WEST, FL 33040

SANTAMARIA MIRIAM

201 RYAN AVE

KEY LARGO, FL 33037

FRERE RICHARD

3818 MUMBY RD

CANADAIGUA, NY 14424

TRACHET ROBERT ALLEN & TRACHET ROBERTA LYNN R/S

228 2ND RD

KEY LARGO, FL 33037

LOPEZ-URGELL JOAQUIN & HILDA

425 NW 60TH COURT

MIAMI, FL 33126

ROWLAND GRACE A

10550 W ST RD 84 UNIT 165

DAVIE, FL 33324

LAMING MICHAELS

221 CRAGMONT CIR

RICHMOND, VA 23233

LOPEZ ARMANDO

213 LOEB AVE

KEY LARGO, FL 33037

IZQUIERDO AMAURY AND MILADYS

3681 HERON RIDGE LN

WESTON, FL 33331

PHELAN JEAN L

232 RYAN AVENUE

KEY LARGO, FL 33037

BOARD OF PUBLIC INSTRUCTION OF MONROE COUNTY

242 WHITE STREET

KEY WEST, FL 33040

KELLY JAMES P & HELEN M

PO BOX 3167

KEY LARGO, FL 33037

DELAND ERIC K

188 BESSIE RD

TAVERNIER, FL 33070

STRAIT RANDY

211 RYAN AVE

KEY LARGO, FL 33037

LUCAS MICHAEL REV TR DTD 12/01/95

7860 SW 182ND TERR

MIAMI, FL 33157

MARTINEZ RUFINO & ADELAIDA

P O BOX 3143

KEY LARGO, FL 33037

RICHCREEK ROBERTA E

PO BOX 1151

KEY LARGO, FL 33037

ACKERMAN MICHAEL J

1 ROBERT STREET

KEY LARGO, FL 33037-4839



PINTO PEDRO J 6300 SW 120 ST PINECREST, FL 33156

COWART LEE J & M'LISS 1112 WATERBROOK LN WESTON, FL 33326

ETZOLD MARK AND ANA 104500 OVERSEAS HWY UNIT B102 KEY LARGO, FL 33037

KLUTTZ WILLIAM EDWARD 104500 OVERSEAS HIGHWAY UNIT B-104 KEY LARGO, FL 33037

HIMELBERGER CORYDON G 104500 OVERSEAS HWY UNIT B-202 KEY LARGO, FL 33037

ZIEGELMEYER WAYNE A SR & DEBORAH A P O BOX 181 IMPERIAL, MO 63052

BILLINGS MARIANNE S LIV TR 08/22/96 C/O BILLINGS MARIANNE S

104500 OVERSEAS HWY APT B 302

KEY LARGO, FL 33037

ELLIS JOHN M AND MARY C

201 NW 130 AVE

PLANTATION, FL 33325

SWENSSON JASON & DEBRA

104500 OVERSEAS HWY - APT B-402

KEY LARGO, FL 33037

CROWTHER WAYNE R

201 BROOKDALE CT DRESHES, PA 19025 CHIARAMONTE NUNZIO AND GLORIA 104500 OVERSEAS HWY UNIT A403 KEY LARGO, FL 33037

RETTIG DAVID C 104500 OVERSEAS HIGHWAY - UNIT B-101 KEY LARGO, FL 33037

SMITH PAUL M & NANCY LEE 1430 NW 99TH AVENUE PLANTATION, FL 33322

GARINO ALFRED R JR & ELLEN M 947 BRIARWOODS RD FRANKLIN LAKES, NJ 07417

LUTTER JON F AND ANNA 3030 NE 46TH ST FT LAUDERDALE, FL 33308

FLETCHER JAMES H & GERDA T

104500 OVERSEAS HIGHWAY #B-301- TAMARIND BAY CLUB KEY LARGO, FL 33037

FONSECA AUGUSTO & CECILIA B 16 SPRING GARDEN STREET CRANFORD, NJ 07016-5657

CANNON-O'MALLEY MICHAEL 104500 OVERSEAS HWY UNIT B-401 KEY LARGO, FL 33037

HIDALGO-GATO ERIK TRUSTEE (ERIK HIDALGO-GATO FAMILY TRUST DD 11/09/93) 16410 STONEHAVEN RD MIAMI LAKES, FL 33014 OAKLEY JOHN V AND ANN

OLD BURSLEDON

SOUTH HAMPTON, UK 5031-8DN ENGLAND



AIELLO JOHN J AND ERNA REUTTER (H/W)
4082 W PALM AIRE DR UNIT 5
POMPANO BEACH, FL 33069

HUNTER R ERIC AND MARGARET A 1129 GOLFVIEW WOODS DR RUSKIN, FL 33573

FIE MARGARET S 104500 OVERSEAS HWY UNIT C-201 KEY LARGO, FL 33037-2979

104500 OVERSEAS HWY UNIT C205

NEWELL FRANCIS D TRUSTEE (FRANCIS D NEWELL REVOC TRUST 9/27/88) 2900 COACH HOUSE LANE NAPLES, FL 33942 VALLE PAULA T

STEHOUWER GARY J & STEHOUWER SUSAN TR (STEHOUWER LIVING TRUST 1-24-92)

P O BOX 78

LAMONT, MI 49430-0078

KEY LARGO, FL 33087

PETRAK TOM & PETRAK JAN & PETRAK CHRISTOPHER R/S 12901 E TANGLEWOOD CIR

PALOS PARK, IL 60464

CLOUTIER JOSEPH M AND LINDA L 247 COMMERICAL ST STE A ROCKPORT, ME 04856

RUH PAUL J AND JULIE G 7373 PINE GROVE LN TWO RIVERS, WI 54241

DOT/ST.OF FL (STATE ROAD DEPARTMENT)

TALLAHASSEE, FL 32399

NIGHTINGALE JEANNINE E 104500 OVERSEAS HWY UNIT C103

KEY LARGO, FL 33037

SOSNOW GREGORY P & ANNE M 104500 OVERSEAS HIGHWAY #C-105 KEY LARGO, FL 33037

WEBER ARTHUR C & LINDA C 45211 VANKER UTICA, MI 48317

VILLANE INVESTMENT PARTNERSHIP 100 PARKER ROAD EATONTOWN, NJ 07724-9618

NYITRAY Z JOHN & SARAH 6600 SW 135 TERRACE MIAMI, FL 33156

AGUILAR PABLO JESUS & ROSE MARY 11403 SW 87 TERR MIAMI, FL 33173

NYITRAY Z JOHN & SARAH 6600 SW 135TH TERRACE MIAMI, FL 33156

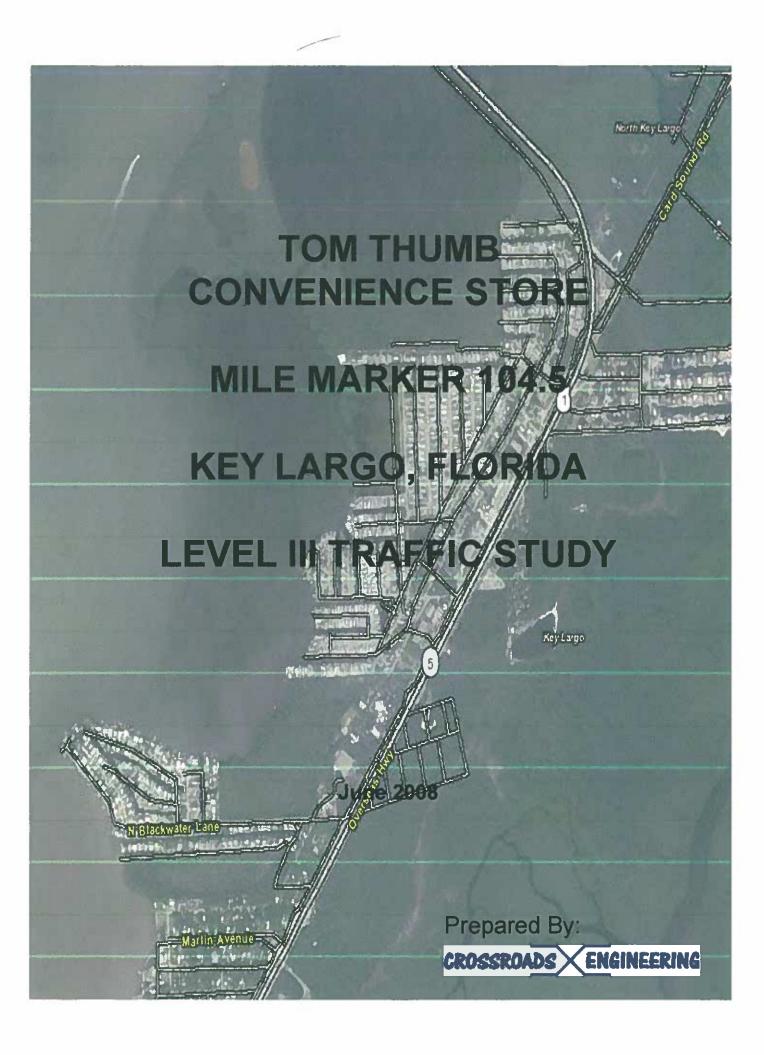
THARP BARRY D & KING EDWARD F II & PETRACCO PETER T/C 2865 SW 30TH AVENUE

KEY LARGO BAPTIST CHURCH INC

PEMBROKE PARK, FL 33009

PO BOX 1063

KEY LARGO, FL 33037



TOM THUMB CONVENIENCE STORE

MILE MARKER 104.5

KEY LARGO, FLORIDA

LEVEL III TRAFFIC STUDY

JUNE 2008

TOM THUMB CONVENIENCE STORE

MILE MARKER 104.5

KEY LARGO, FLORIDA

LEVEL III TRAFFIC STUDY

Prepared for Tom Thumb Stores 97 W. Okeechobee Road Hialeah, Florida 33010 (305) 885-5451

Prepared by
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June 2008 JN 2008-004

TOM THUMB CONVENIENCE STORE

MILE MARKER 104.5

KEY LARGO, FLORIDA

LEVEL III TRAFFIC STUDY

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APPENDIX

TURNING MOVEMENT DATA
ITE TRIP GENERATION/FDOT SEASONAL FACTORS
SIGNALIZED INTERSECTION ANALYSES
UNSIGNALIZED INTERSECTION ANALYSES
REDUCED SITE PLAN & AERIAL

TOM THUMB -CONVENIENCE STORE MILE MARKER 104.5 KEY LARGO, FLORIDA LEVEL III TRAFFIC STUDY

INTRODUCTION

Tom Thumb Food Stores, Inc. (the developer) is proposing to redevelop an existing convenience store with four (4) fueling positions to a convenience store with twelve (12) fueling positions. There are no plans to change the size of the convenience store building. The site is located at 104701 Overseas Highway near US 1 Mile Marker 104.5. Figure 1 depicts the general location and a reduced survey is in the appendix.

Monroe County's traffic consultant was contacted to discuss the scope of work needed for the traffic study. It was agreed that a level three study is needed to address the project's traffic impacts.

ACCESS AND ADJACENT LAND USES

The site has frontage along both the north- and southbound lanes of US 1. Currently, the site has two driveways, one along the southbound side and one along the northbound side of US 1. See the attached survey for more details. There are no plans to change the existing access.

TRAFFIC GENERATION

Trip generation is estimated using information from a January 1991 independent report, which appeared in the Institute of Transportation Engineers (ITE) monthly Journal regarding a study performed in Florida of convenience stores with fueling access. The article (Trip Generation Studies of Gas/Convenience Stores), estimated PM peak hour traffic at 18 sites in Collier, Lee and Palm Beach counties. Monroe County's traffic consultant agreed to use the trip generation as depicted in the independent study. However, no daily data were collected during the independent study. It was agreed to use the PM peak to daily trip generation ratio (0.082) as reported from nation-wide studies, which appear in the seventh edition of the Trip Generation Report, published by ITE (land use code No. 945). It was also agreed that a 56% pass-by rate is appropriate, as depicted in the nation-wide study, and is used in this report to estimate primary trips to be generated by the proposed change in development. Table 1 depicts the existing and proposed trip generation.

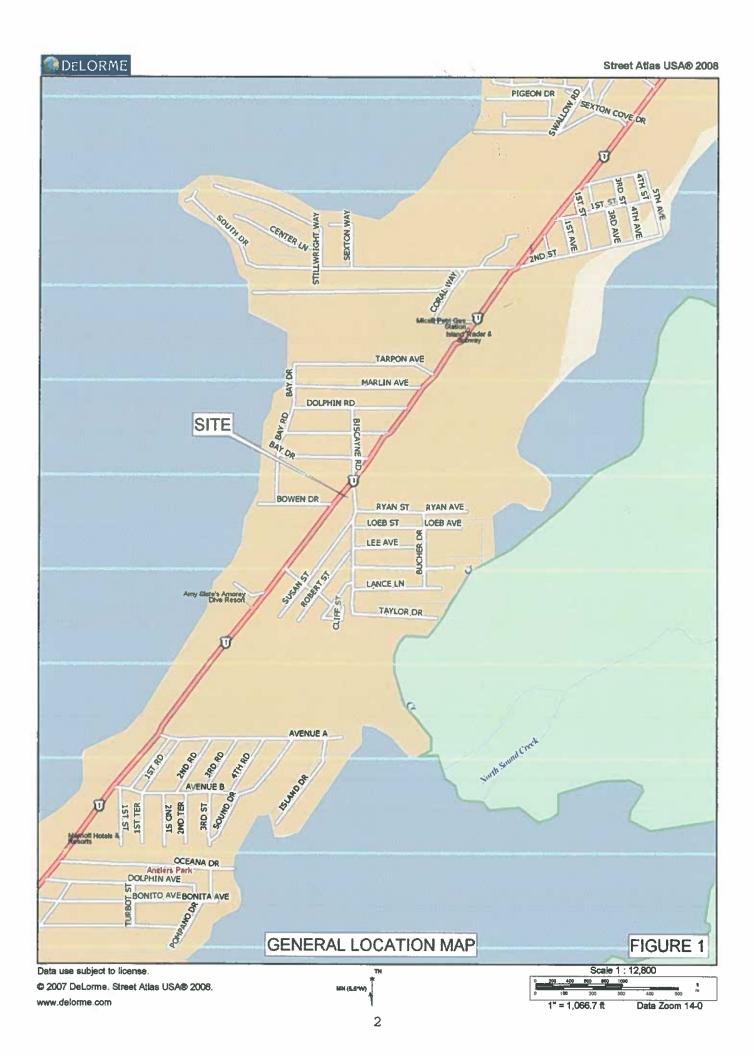


Table 1 Daily and PM Peak Hour Trip Generation for a Convenience Store with Vehicle Fueling Positions (vfp's)

	Weighted Daily	DN.	/I Peak I	Hour
Land Use	Volume	ln ''	Out	Total
Proposed: C-store 2,496 sf 12 vfp's Subtotal	1,415 1,065 2,480	58 44 102	58 44 102	116 88 204
Less pass-by trips (56%)	-1,389	-57	-57	-104
Gross primary trips ¹ (Total Site)	1,091	45	45	90
Existing: C-store 2,496 sf 4 vfp's Subtotal	-1,415 -366 -1,781	-58 - <u>15</u> -73	-58 -15 -73	-116 -30 -146
Net gross trips	-699	-29	-29	-58
Less pass-by trips (56%)	-391	-16	-16	-32
Net new primary trips ²				
Primary trips	308	13	13	26

¹ Total site gross primary trips 2 Net new trips on the roadway network

DISTRIBUTION AND TRIP LENGTH

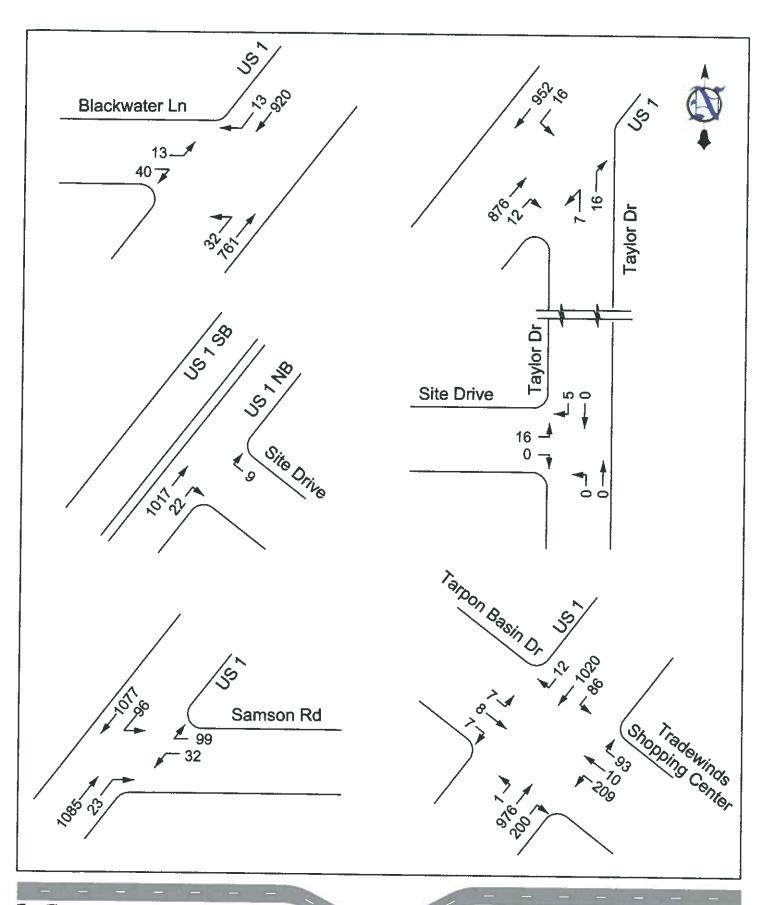
There are numerous convenience stores with fueling facilities throughout this area of the Keys. One need not travel far for these services. Both daily and PM peak hour traffic are estimated to be equal in both the north/south directions. The average trip length to the north is one mile (1) and south is estimated at two (2) miles. It is estimated that no primary trips to this development will occur from the mainland through Segment 24, hence the short average trip length to the north.

EXISTING US 1 TRAFFIC

It was agreed with the County's traffic consultant that the following intersections along US 1 are to be analyzed in this study.

- Blackwater Lane –unsignalized intersection north of site.
- Taylor Drive unsignalized intersections north of site.
- Site drive at site. Site drive Taylor Drive
- Samson Road -- unsignalized intersection south of site Tarpon Basin signalized intersection south of site.

All intersection data collection occurred on a weekday, between 11:30 AM and 1:30 PM. The midday peak period historically typifies peak period traffic that occurs hourly in this area of the Keys. Figure 2 depicts existing traffic volumes at the intersections under study.



Tom Thumb
M.M. 104
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Figure 2
Existing Peak Hour Volume

SEASONAL TRAFFIC ADJUSTMENT

The Florida Department of Transportation year 2006 weekly volume factors (latest available) were used to estimate peak seasonal traffic conditions from the collected data

HISTORICAL TRAFFIC VOLUME

The company's intention is to have the project built and operating by the close of year 2009. Therefore, existing traffic volumes were factored for yearly growth. The year 2007 US 1 Arterial Travel Time and Delay Study for Monroe County, Florida was used as a guide to increase existing volume data by an annualized rate of 1.54% to year 2009, build-out conditions.

APPROVED DEVELOPMENT TRAFFIC

Monroe County Planning staff was contacted regarding other approved but not built projects in the Key Largo/Tavernier area. According to staff, there are no approved, but not built projects in the Key Largo/Tavernier area, however there are projects currently going through the approval process.

TRAFFIC DISTRIBUTION FOR PEAK PERIOD ANALYSIS

The north/south distribution of traffic volume along this general area of US 1 during the peak period is estimated to be about equal. Aerial photos aided in the distribution and assignment of site traffic.

FUTURE BUILD-OUT YEAR TRAFFIC

Table 2 depicts the midday peak hour volume data collected at the intersections under study. Table 2 also shows peak season traffic, a one (1) year growth and the proposed development's PM peak hour traffic volume (as shown in Table 1). Figure 3 depicts site only traffic and Figure 4 depicts peak season, a one-year growth and site PM peak hour traffic at the study locations.

PM PEAK HOUR LEVEL OF SERVICE

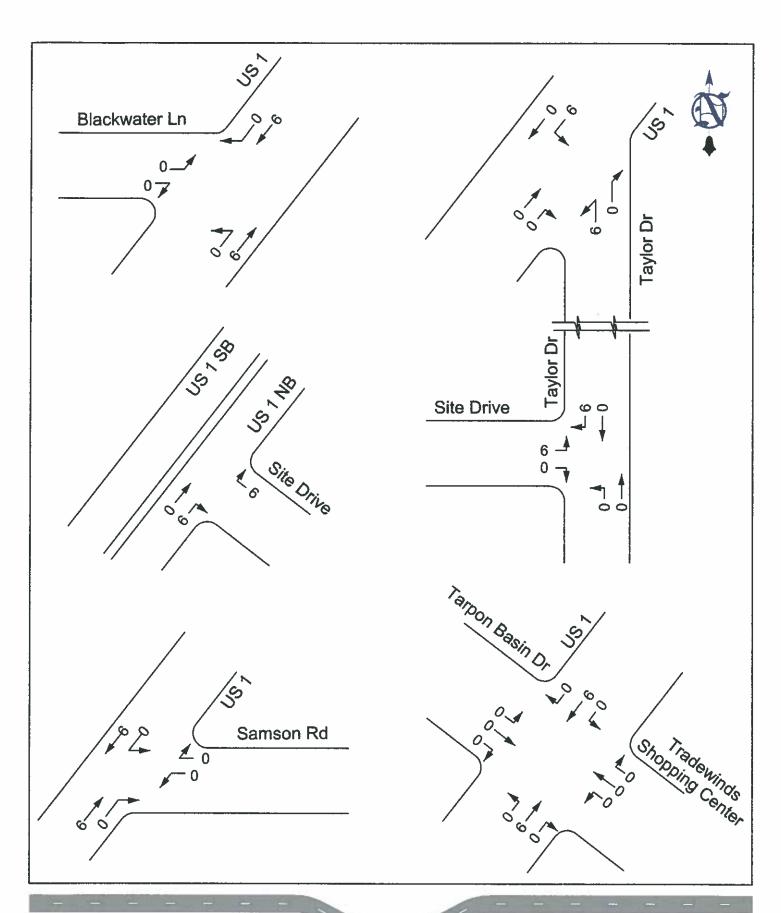
Table 3 summarizes Midday peak hour levels of service (LOS) analyses performed at the intersections under study. All future year analyses reflect midday peak hour traffic volume conditions during the peak season (peak day during the peak week) and a one year annualized growth. All intersection movements will operate within acceptable LOS conditions after build-out and occupancy of the proposed development expansion.

TABLE 2
TRAFFIC VOLUME AT US 1 INTERSECTION STUDY LOCATIONS
(US 1 Considered a North / South Roadway for Analysis Purposes)

(05 1 00)	nisidered a No	rtn / South Roady	vay for Analysis	Purposes)		2009
			BACKGROUND			WITH
	2008	SEASONAL	GROWTH	2009		SITE
US 1 (Overseas Highway)	MIDDAY	INCREASE	INCREASE	WITHOUT	SITE	TOTAL
INTERSECTION AND APPROACH	VOLUME	VOLUME ¹	VOLUME ²	SITE	VOLUME	VOLUME
BLACKWATER LANE						
EBLEFT	13	2	0	15	0	15
EB RIGHT	40	7	0	47	0	47
NB LEFT	32	6	0	38	0	38
NB THRU	761	277	12	1050	8	1056
SB THRU	920	335	14	1269	8	1275
SB RIGHT	13	2	0	15	0	15
TAYLOR DRIVE						
WB LEFT	7	1	0	8	8	14
WB RIGHT	18	3	ő	19	0	19
NB THRU	878	329	13	1218	0	1218
NB RIGHT	12	2	0	14	Ö	14
SBLEFT	16	3	0	19	6	25
SB THRU	952	347	15	1314	Ö	1314
CITE ODIVE (US 4 NO)						
SITE DRIVE (US 1 NB) WB RIGHT	0	0	•	44	^	49
NB THRU	9 1017	0	0 18	11	6	17
NB RIGHT	22	0	0	1033 26	0	1033
IND KIGHT		- 4	0	20	6	32
SITE DRIVE at TAYLOR DRIVE						
EBLEFT	18	3	0	19	6	25
EB RIGHT	0	0	0	0	0	0
NB LEFT	0	0	0	0	0	0
NB THRU	Ō	Ō	Ö	ŏ	ő	Ö
SB THRU	0	0	0	0	0	0
SB RIGHT	5	11	0	8	6	12
SAMSON ROAD						
WB LEFT	32	8		-00	•	
WB RIGHT	99	18	0 1	38 118	0	38
NB THRU	1085	383	17	1485	0 8	118
NB RIGHT	23	4	0	27	0	1491 27
SBLEFT	96	17	1	114	0	114
SB THRU	1077	393	17	1487	8	1493
TARRON RAGIN CRIVE						
TARPON BASIN DRIVE	7	4	^	-	_	
EB LEFT	7	1	0	8	0	8
EB THRU EB RIGHT	8 7	1	0	9	0	9
WB LEFT	209	1 29	0	8	00	8
WB THRU	10	38	2	249	0	249
WB RIGHT	93	2 17	0 1	12	0 0	12
NB LEFT	1	0	0	111	0	111
NB THRU	978	356	15	1347		1353
NB RIGHT	200	36	2	238	6 0	238
SBLEFT	88	16	1	103	0	103
SB THRU	1020	372	16	1408	6	1414
SB RIGHT	12	2	ő	14	0	14
<u> </u>				• •		•-1

¹ See report appendix (FDOT Peak Season Factors) for seasonl increases

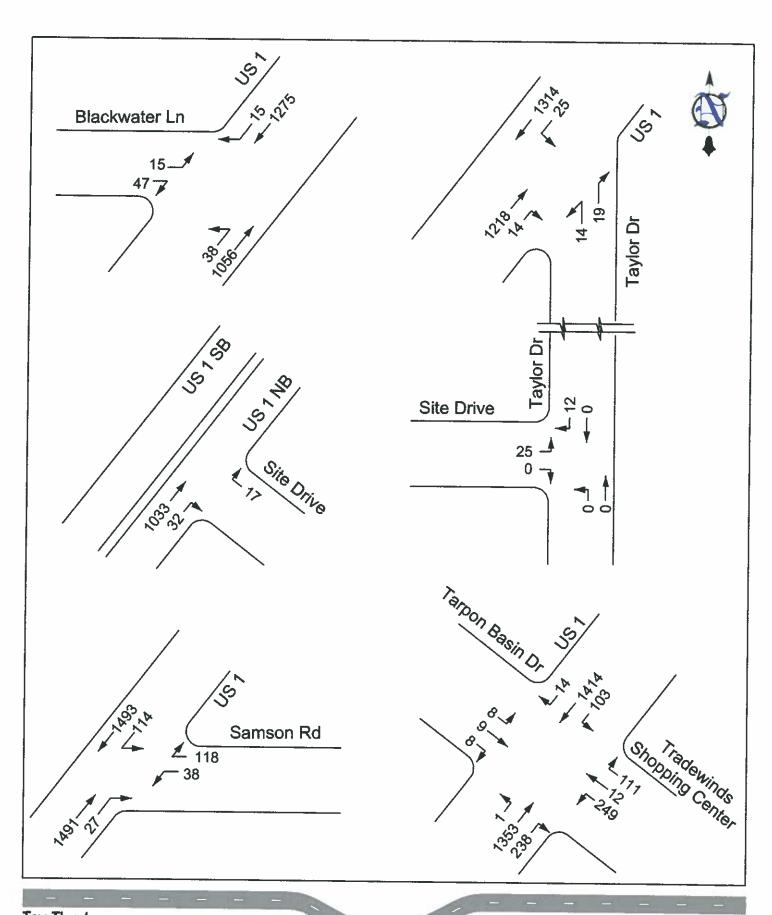
 $^{^2}$ A growth factor of 1.54% is used to increase US 1 through volume and a 0.77% increase is used for local roadways and turns to and from US 1.



Tom Thumb M.M. 104

CROSSROADS ENGINEERING

Figure 3
Proposed Site Only Volume



Tom Thumb
M.M. 104
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Figure 4 Year 2009 Peak Hour With Site Volume

TABLE 3
LEVEL OF SERIVICE AT STUDY LOCATIONS
(US 1 considered a north / south roadway for analysis purposes)

US 1 (Overseas Highway) INTERSECTION AND APPROACH	2008 PEAK SEASON LOS	YEAR 2009 WITHOUT SITE LOS	YEAR 2009 WITH SITE TOTAL LOS
Blackwater Lane			
EB LEFT	С	С	C
EB RIGHT	В	В	В
NB LEFT	В	В	В
Taylor Drive	_		
WB LEFT	Ċ	С	С
WB RIGHT	В	В	В
SB LEFT	В	В	В
Tom Thumb Driveway WB RIGHT	-	-	В
Taylor Drive & Site Drive EB LEFT & RIGHT	_	_	Α
NB LEFT			A
Samson Road			
WB LEFT	С	D	D
WB RIGHT	В	c	- C
SB LEFT	В	C	C
Tarpon Basin			
EB LEFT & THRU	С	С	С
EB RIGHT	Ċ	C	Č
WB LEFT & THRU	С	D	D
WB RIGHT	С	С	С
NB LEFT	Α	В	В
NB THRU	В	С	С
NB RIGHT	В	В	В
SB LEFT	Α	В	В
SB THRU & RIGHT	В	С	C
INTERSECTION LOS	В	С	С

US 1 ARTERIAL TRAFFIC SUMMARY

The development is situated along Monroe County's designated US 1 Segment 23. Table 4 depicts a summary of daily US 1 arterial traffic volume and proposed site traffic. Note that the proposed development's traffic volume will generate approximately 311 two-way daily volume trips in Segment 23. There will be 10,941 reserve trips remaining in Segment 23 after the proposed redevelopment of the Tom Thumb property.

SECONDARY STREET IMPACTS

The 2002 FDOT "Quality/Level of Service Manual is used to determine the secondary street impacts from the proposed development. It is noted in Table 4-3 of the FDOT Manual that for two-lane undivided State roadways (in this case a local roadway) the LOS "D" threshold volume is 13,600 vehicles per day. The information below depicts the estimated two-way daily traffic volume based on applying the FDOT K100 value of 0.092.

	Peak Hour					Year 2008 Est.	
Roadway	Link Volume	Seasonal Volume	Growth Volume	Site Volume	Sub- total		Est. LOS
Taylor Drive	51	3	1	12	67	728	С

SIGHT TRIANGLES AND ON-SITE VEHICLE MANEUVERABILITY

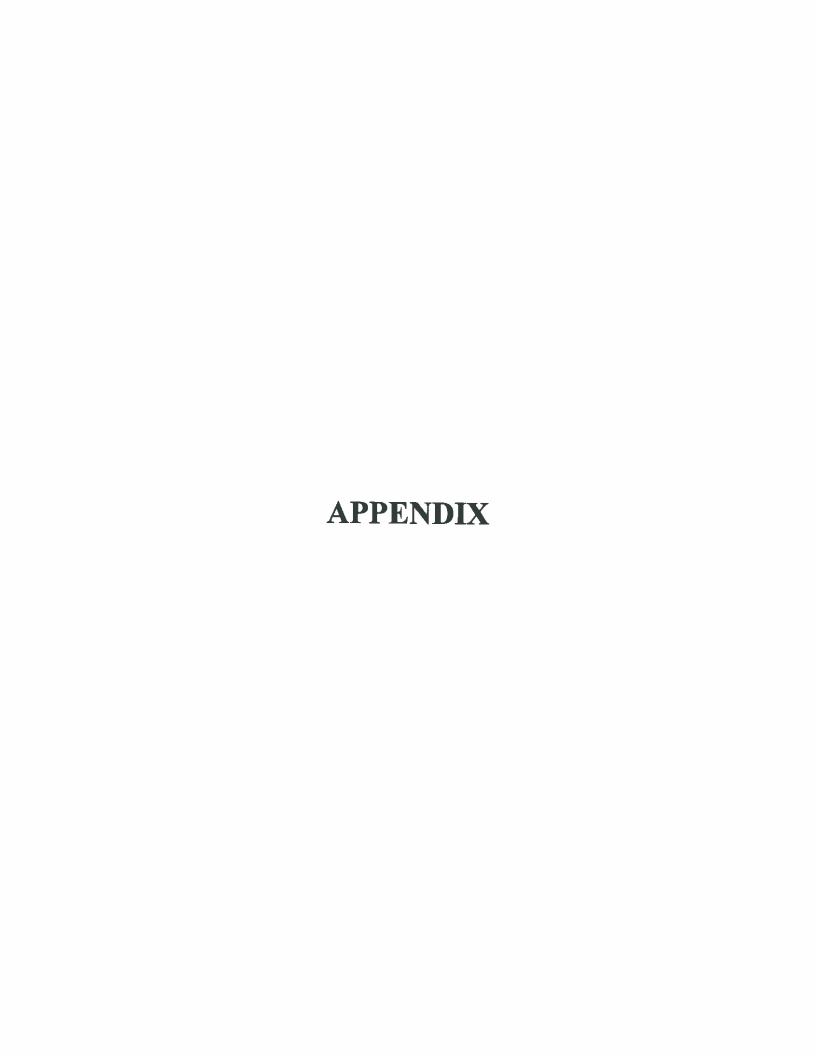
Sight triangles and vehicle maneuverability will be shown on the final site plan to be submitted with application.

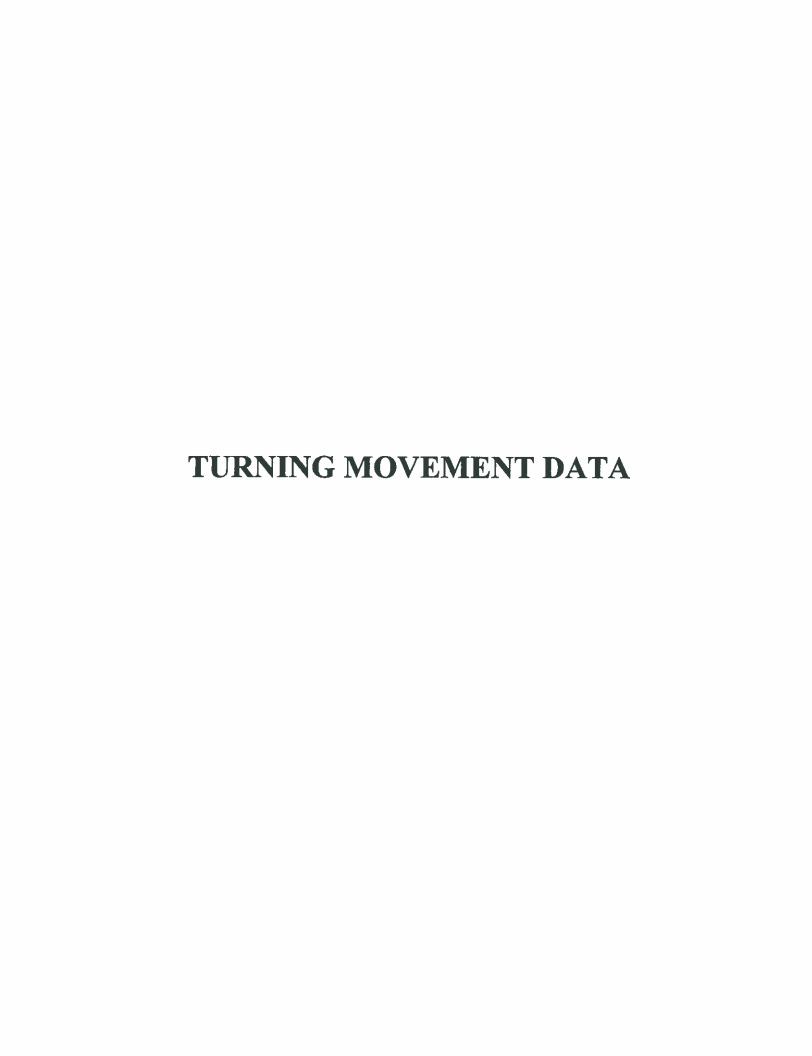
LOCATION OF MEDIAN OPENINGS

- Bowen Drive 850 ft north -unsignalized.
- Taylor Drive at site –unsignalized.
- Esther Street 1,050 ft south –unsignalized.

SUMMARY

Based on the results of this study and the criteria set forth by Monroe County Traffic Reporting Guidelines, the proposed redevelopment of the subject property will not degrade the level of service beyond acceptable conditions along the US 1 Corridor, Taylor Drive, or any of the intersections studied in this report.





CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO COUNTY: MONROE

File Name: BLACKWATER Site Code : 00000000 Start Date : 1/9/2008 Page No : 1

		Ø	US1 Southbound				2	US1 Northbound				BLAC	BLACKWATER LANE	ANE		
Start Time	Utums	Left	Thru	Right	App. Total	Utums	Per	Thru	Right	Ann. Totat	Peck	Total	Thu	thing:	Ann Total	Ind Total
11:00 AM	0	0	126	-	127	0	r	186	0	189	c		c	c	a	225
11:15 AM	0	0	284	4	288	0	2	174	· c	176	· c	- c		•	7	200
11:30 AM	-	0	130	'n	134	0	9	194	-	200	· c	·	o c	r v	t u	240
11:45 AM	0	-	254	7	257	-	=======================================	170	0	182	· c	- 65	•	, L	0 0	4 A
Total	-	-	794	9	908	-	22	724	0	747	0	l la	0	33	38	1591
12:00 PM	0	-	209	ю	213	0	6	177	0	186	0	ю	0	7	101	409
12:15 PM	0	0	247	4	251	0	00	201	0	209	0	4	0		+	471
12:30 PM	0	0	210	4	214	63	4	213	0	220	0	. С	0	10	- 67	447
12:45 PM	-	0	236	9	243	0	က	197	0	200	0	0	0	e	m	446
Total	-	-	902	17	921	ю	24	788	0	815	0	10	0	27	37	1773
Grand Total	7	7	1696	27	1727	4	46	1512	0	1562	0	15	0	9	75	3364
Approch %	0.1	0.1	98.2	1.6		0.3	2.9	96.8	0		0	20	0	80		
Total %	0.1	0.1	50.4	8.0	51.3	0.1	1.4	44.9	0	46.4	0	0.4	0	80	2.2	
AUTOS	8	7	1625	24	1653	*	46	1386	0	1436	0	13	0	528	71	3160
% AUTOS	100	100	95.8	88 0.0	95.7	100	100	91.7	0	91.9	0	86.7	0	7.96	7 7	93.9
HEAVY VEHICLES	0	0	71	c,	74	0	0	126	0	126	0	2	0	2	4	204
% HEAVY VEHICLES	0	c	4.2	11.1	4.3	_	_	C.	_	C.	_	123	<	2.0	2	ď

PROJECT: KEY LARGO COUNTY: MONROE

CLIENT : TOM THUMB JOB NO : 2008-004

File Name: BLACKWATER
Site Code: 000000000
Start Date: 1/9/2008
Page No: 2

		Ø	Southbound				2	US1 Morthbound				BLAC	BLACKWATER LANE	N.		
Start Time	thime	Hall	There	Diete		1.00		MINDOMIKA	-1		The second second		Castbourne			
44.00		100	nw.	rogni	App. Iotal	Sums	Tell		Right	App. Total	Paris	- Ha	These	0.00	Ann Titel	
TOBE THOSE AND THOSE AND THOSE AND TO THE PORT OF T	2 AM to 12:45 P.	M - Peak 1 of 1										1001	ALC:	Right	App. lotal	Int. Total
Peak Hour for Entire Intersection Begins at 11:45 AW	tersection B	Regins at 11	:45 AM													
11:45 AM	0	-	254	2	257	-	1	170	c	100	c	ť	•	ļ		
12:00 PM	_	-	200	~	212	٠ .		- 1	5 (701	5	2	5	9	9	458
40:45	•	- 0	600	η,	2 1 2	-	3 0	<i>)</i> / L	0	186	0	က	0	7	10	409
M.4.01.71	>	>	/47	4	251	0	00	201	_	200	_	•	c	1		
12:30 PM	0	0	210	4	214	٣	*	213		200	> 0	re	5 (- !	= :	4/1
Total Volume	0	2	920	5	935		22	754	0	077	0	2	0	10	13	447
% Ann Total	c	0	7 00	7	3		7,		o (8	>	13	0	40	53	1785
שונים ביי	000	3.00	20.4	87		0.0	4	95.5	0		0	24.5	0	75.5		
100	oon.	DOC.	938.	.813	.910	.333	.727	.893	000	906	000	813	000	303	703	0.47

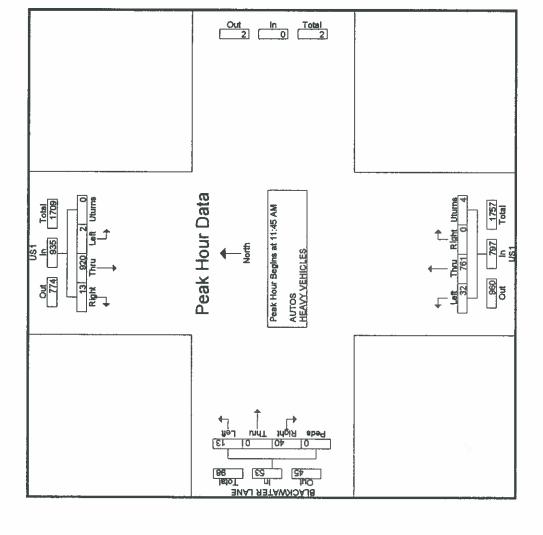
PROJECT: KEY LARGO

COUNTY: MONROE

CLIENT: TOM THUMB JOB NO: 2008-004



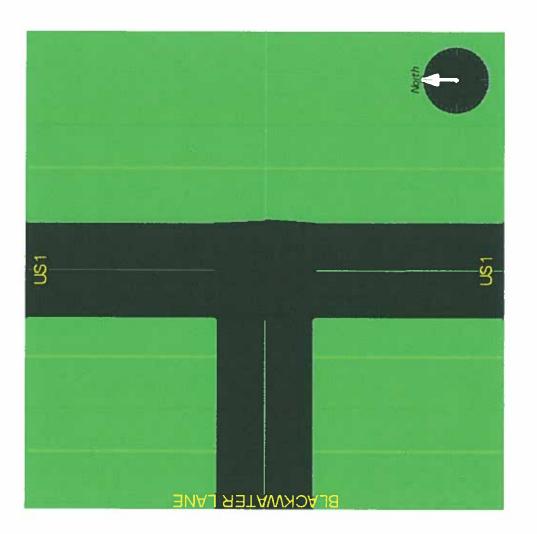
File Name : BLACKWATER Site Code : 00000000 Start Date : 1/9/2008 Page No : 3



JOB NO : 2008-004 PROJECT: KEY LARGO COUNTY : MONROE

CLIENT: TOM THUMB

Crossroads Engineering Data, Inc. 13284 SW 120th Street Miami, FL 33186 Ph: 305-233-3997 Fax: 305-233-7720



File Name: BLACKWATER
Site Code: 00000000
Start Date: 1/9/2008
Page No: 4

PROJECT: KEY LARGO COUNTY: MONROE

CLIENT: TOM THUMB JOB NO: 2008-004

File Name: TAYLOR Site Code: 00000000 Start Date: 1/9/2008 Page No: 1

			US1					TAYLOR DR				US1	-			
		51	Southbound					Westbound				~	Northbound			
Start Time	Crums	Left		Right	App. Totaf	Peds	Left	Thru	Right	App. Total	Utums	F83	Thru	Right	App. Total	Int Total
11:00 AM	0	S	131	0	136	0	-	0	2	က	0	0	180	4	184	323
11:15 AM	0	9	271	0	277	0	_	0	2	67	0	c	201	• •	200	489
11:30 AM	0	m	161	0	164	0		0	2	r	4	0	201	^	212	379
11:45 AM	F	ဖ	264	0	271	0	-	0	m	4	4	0	192	. m	199	474
Total	-	20	827	0	848	0	4	0	ത	13	00	0	774	22	804	1665
12:00 PM	0	£0	214	0	219	0	-	0	4	ιΩ	0	0	203	8	205	429
12:15 PM	0	ιΩ	289	0	294	0	0	0	4	4	0	0	201	φ	207	505
12:30 PM	0	S.	204	0	209	0	9	0	4	10	0	0	218	7	220	439
12:45 PM	0	-	245	0	246	0	0	0	4	4	0	0	254	7	256	506
Total	0	16	952	0	896	0	7	0	16	23	0	0	876	12	888	1879
Grand Total	~	36	1779	0	1816	0	11	0	25	36	00	0	1650	34	1692	3544
Apprch %	0.1	8	86	0		0	30.6	0	69.4	200	0.5	0	97.5	2		
Total %	0	-	50.2	0	51.2	0	0.3	0	2.0	-	0.2	0	46.6	-	47.7	
AUTOS	-	31	1655	0	1687	0	10	0	20	30	00	0	1510	33	1551	3268
% AUTOS	100	86.1	93	0	92.9	0	90.9	0	80	83,3	100	0	5.5	97.1	91.7	92.2
HEAVY VEHICLES	0	ĸ	124	0	129	0	-	0	2	9	0	0	140	-	141	276
A NEAVY VENICIES	-	43.0	7	c	7.4	c	0	•	90	107	•	•	6	0	0	1

CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO COUNTY: MONROE

: 00000000 : 1/9/2008 : 2 File Name: TAYLOR Site Code: 000000000 Start Date: 1/9/2008 Page No: 2

		ŭ	US1 Southbound					TAYLOR DR Westbound				US1	31 Northbound			
Start Time	Chume	Left	Three	Right	App. Total	Peds	Fed	Total	Right	Ann Total	Misma	100	Then	Dishe	Ann Total	las Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1	AM to 12:45 PM	- Peak 1 of 1					1		l					No.	Distriction of the last	118. 1018
eak Hour for Entire Intersection Begins at 12:00 PM	tersection B	egins at 12.	:00 PM													
12:00 PM	0	5	214	0	219	0	-	0	4	-CO	0	0	203	2	205	429
12:15 PM	0	ည	289	0	294	0	0	0	4	4	0	0	201	φ	207	505
12:30 PM	0	ഹ	204	0	209	0	ဖ	0	4	10	0	0	218	2	220	439
12:45 PM	0	1	245	0	246	0	0	0	4	4	0	0	254	2	256	506
Total Volume	0	16	952	0	896	0	2	0	16	23	0	0	876	12	888	1879
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PROJECT: KEY LARGO COUNTY: MONROE

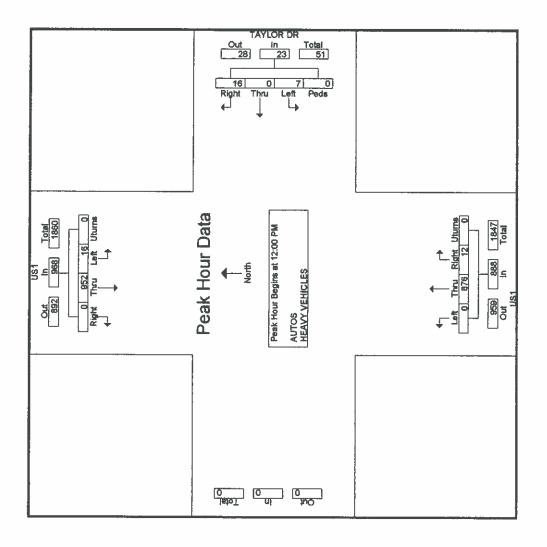
CLIENT: TOM THUMB JOB NO: 2008-004

: 00000000 : 1/9/2008 : 3

Site Code : Start Date : Page No :

File Name: TAYLOR

Crossroads Engineering Data, Inc. 13284 SW 120th Street
Miami, FL 33186
Ph: 305-233-3997 Fax: 305-233-7720



JOB NO: 2008-004 PROJECT: KEY LARGO CLIENT: TOM THUMB

COUNTY: MONROE

AYLOR DR 53

File Name: TAYLOR Site Code: 00000000 Start Date: 1/9/2008

4 Page No

File Name: NB US 1 TOM THUMB DW MM 104

Site Code : 00000000

JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

COUNTY: MONROE

CLIENT: TOM THUMB

Start Date: 1/17/2008 Page No: 1

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12:30 PM	n	n	274	00	282	2
12:45 PM	c	က	246	N	248	120
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01:15 PM	ഹ	S.	251	7	258	2
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AUTOS	19	19	1949	37	1986	20
% AUTOS	100	100	100	100	100	100
HEAVY VEHICLES	0	0	0	0	0	
% HEAVY VEHICLES	0	0	0	c	•	

File Name: NB US 1 TOM THUMB DW MM 104

Site Code : 00000000 Start Date : 1/17/2008 Page No : 2

JOB NO.: 2008-004
PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY COUNTY: MONROE

CLIENT: TOM THUMB

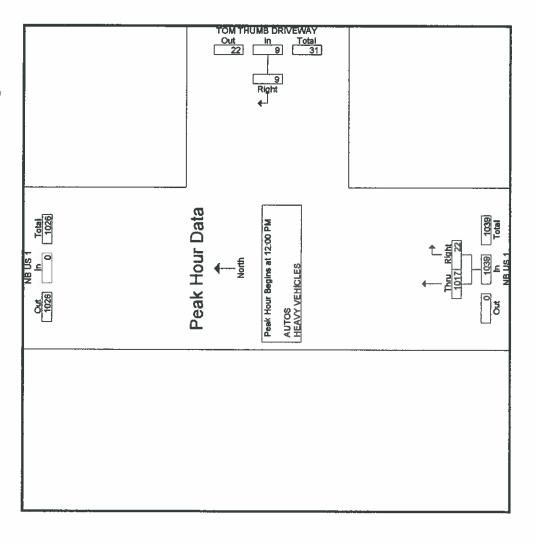
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Peak Hour for Entire Intersection Begins at 12:00 PM						
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JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

COUNTY: MONROE

CLIENT: TOM THUMB

File Name: NB US 1 TOM THUMB DW MM 104 Site Code: 000000000 Start Date: 1/17/2008 Page No: 3



PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

COUNTY: MONROE

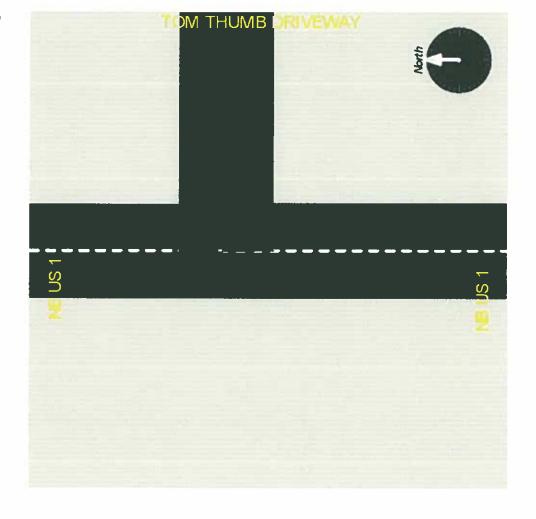
CLIENT: TOM THUMB

JOB NO.: 2008-004

File Name: NB US I TOM THUMB DW MM 104 Site Code: 00000000

Start Date : 1/17/2008

Page No



CLIENT: TOM THUMB

JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

COUNTY: MONROE

Site Code : 00000000 Start Date : 1/17/2008 Page No : 1

File Name: TAYLOR DR TOM THUMB DW MM 104

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December Southbound December Decembe			TAM.OR DR		7	AYLOR DR		LMOT	THUMB DRIVEWAY		
Third Right App. Total Left Third App. Total Left Third App. Total Left Third App. Total Left Left Left Third App. Total Left			Southbound		Ž	orthbound			Facthound		
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JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

COUNTY: MONROE

CLIENT: TOM THUMB

Site Code : 000000000 Start Date : 1/17/2008 Page No : 2

File Name: TAYLOR DR TOM THUMB DW MM 104

Page No

		TAYLOR DR Southbound			TAYLOR DR Northbound		TOM	TOM THUMB DRIVEWAY		
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JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

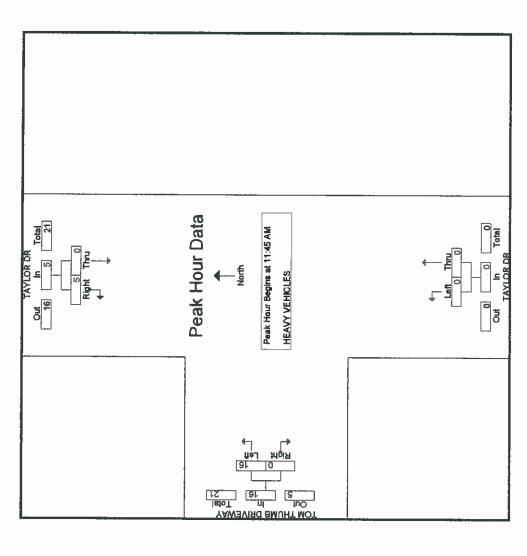
COUNTY: MONROE

CLIENT: TOM THUMB

: 000000000 : 1/17/2008 Start Date Site Code

File Name : TAYLOR DR TOM THUMB DW MM 104

Page No



JOB NO.: 2008-004 PROJECT: TOM THUMB LEVEL 3 TRAFFIC STUDY

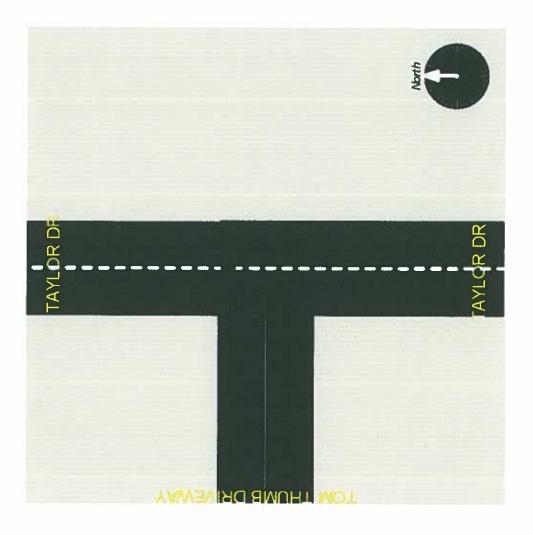
COUNTY: MONROE

CLIENT: TOM THUMB

Füe Name: TAYLOR DR TOM THUMB DW MM 104 Site Code: 00000000

Start Date : 1/17/2008

Page No : 4



CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO

COUNTY: MONROE

File Name: SAMSONgg

Site Code : 00001908 Start Date : 1/9/2008 Page No : 1

Start Time 11:00 AM 11:15 AM	•	US1		100			200			
Start Time 11:00 AM 11:15 AM	•			Z 0	SAMSON RD.			.sc		
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12:45 PM	2	20	243	0	00	90	0	274		571
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HEAVY VEHICLES	0	0	0	0	0	0		0		0
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PROJECT: KEY LARGO COUNTY: MONROE

CLIENT: TOM THUMB JOB NO: 2008-004

File Name: SAMSONgg

Site Code : 00001908 Start Date : 1/9/2008 Page No : 2

Page No

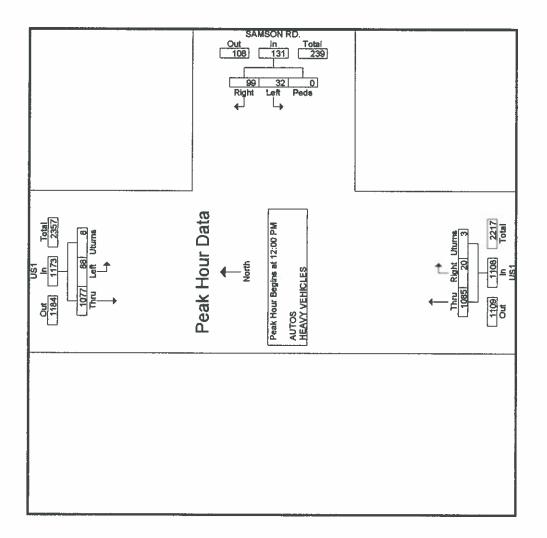
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JOB NO: 2008-004 PROJECT: KEY LARGO

COUNTY: MONROE

CLIENT: TOM THUMB

Crossroads Engineering Data, Inc. 13284 SW 120th Street
Miami, FL 33186
Ph: 305-233-3997 Fax: 305-233-7720



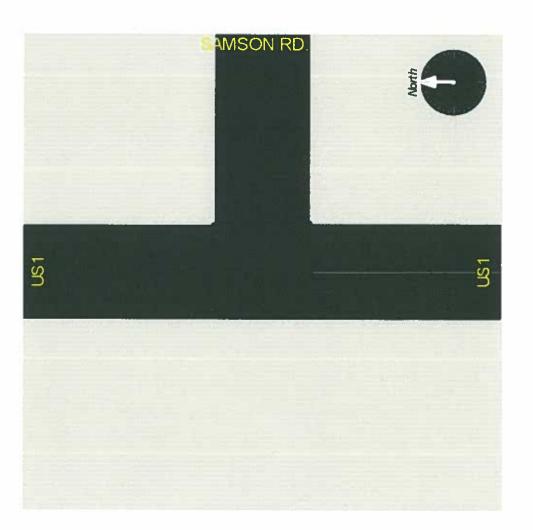
File Name: SAMSONgg

Site Code : 00001908 Start Date : 1/9/2008 Page No : 3

CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO COUNTY: MONROE

File Name: SAMSONgg Site Code: 00001908 Start Date: 1/9/2008 Page No: 4

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CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO COUNTY: MONROE

: 00565758 : 1/9/2008 File Name : TARPON Site Code : Start Date : Page No :

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PROJECT: KEY LARGO COUNTY: MONROE

CLIENT: TOM THUMB JOB NO: 2008-004

File Name: TARPON Site Code: 00565758

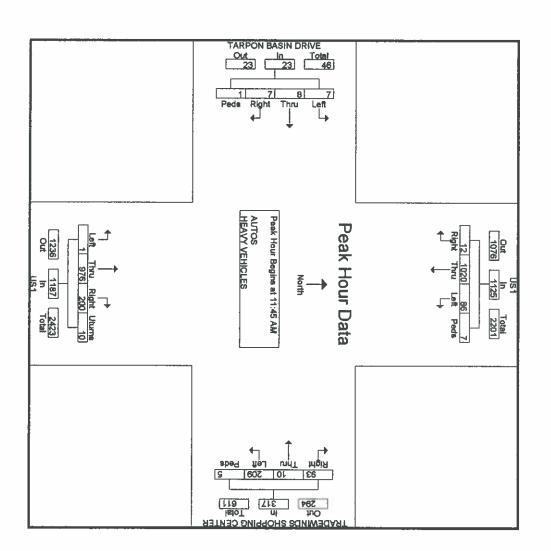
: 1/9/2008 : 2 Start Date : Page No :

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12:00 PM	0	22	273	2	300	-	51	4	00	8	82	က	-	259	12	38	313	0	က	-	2	9	701
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.946

CLIENT: TOM THUMB JOB NO: 2008-004 PROJECT: KEY LARGO

COUNTY: MONROE



File Name: TARPON Site Code: 00565758

Start Date : 1/9/2008 Page No : 3

CLIENT: TOM THUMB

PROJECT: KEY LARGO COUNTY: MONROE JOB NO: 2008-004

TRADEWINDS SHOPPING LS1 DRIVE NISAB NO9RA

File Name: TARPON Site Code: 00565758

Start Date : 1/9/2008

Page No : 4

ITE TRIP GENERATION FDOT SEASONAL FACTORS

Trip Generation Studies of Gas/Convenience Stores

BY GREG LUTTRELL

he purpose of this study was to begin establishing a local database of trip generation characteristics for gas/convenience sites. Recently, the development review process has seen an increasing number of these combined-use sites, which include both the sale of gas and convenience (grocery) items. The increase in popularity of these sites leads to an emphasis on the need to know and understand their trip characteristics. By establishing a local database containing these data, a more realistic assessment of their impacts may be made.

Recently, the trip generation subcommittee of the Florida District/Section of the Institute of Transportation Engineers sent out a call for additional data. Among the new land uses identified as having data needs is the "Convenience Market with Gasoline Pumps" (land-use code 853). Currently, little published data exist for this land use. Afternoon peak-hour trip generation data for this land use were collected in our study. The study acts as an initial step in helping local development and traffic engineering communities to understand trip characteristics relating to gas/convenience sites.

Study Methodologies

The trip generation subcommittee has distributed for comment a draft procedures manual for the collection of trip generation data. Titled *Trip Generation Data Collection Procedures Manual* (April 1988), it is meant to be used in

conjunction with the ITE trip generation report. This procedures manual outlines a summary of current thinking on what data are required for "a thorough trip generation study." This thorough study would include the following items:

- 1. The average weekday traffic generated by a particular land use.
- Variations in rates to be expected on weekends.
- The specific peak hour and peakhour traffic volumes of the generator (study site).
- 4. The volume of traffic generated by the study site during the peak hour of the adjacent roadway(s).
- The directional split (entering versus exiting) of traffic during the peak hours and on a daily basis.
- The person-per-vehicle (occupancy) factor for site-oriented trips.
- 7. The distribution of trips by mode (passenger car, truck, bus, taxi, etc.).
- The number of new trips generated by the study site versus the number of trips diverted from the existing traffic stream.

For many different land uses, each of these items will have a varying degree of availability and importance. For example, is the weekend trip variation of an office building necessary? Probably not because most offices are closed on weekends, thus generating little or no traffic. Likewise, without the support of many technicians, attempting to collect passby data for a regional mall with many out parcels would be extremely difficult.

This type of reasoning led to the collection of only that data that were obtainable with current resources and that would be the most usable.

The data actually collected focused on three principal areas: trip generation data during the afternoon peak hour of the adjacent roadway; directional distribution (split) during this time period; and a breakdown of trips by purpose (gas. convenience, or both).

Data were collected only during the afternoon peak hour for two reasons. Locally, the afternoon peak hour is the critical time period for roadway operations and the period used for site impact analysis. Morning peak hour and daily data were not collected. This study strived to collect and analyze only information that could be readily used by the engineering and development sectors. Collecting morning peak-hour data would not have satisfied this purpose. Also, collecting data for longer periods becomes very manpower intensive.

Directional split is not an important variable for this land use because each vehicle spends only a small amount of time on site. It is presented here because it was a by-product of the other data collected. This study did not attempt to collect all eight of the previously presented items. To do so would have required a prohibitive number of technicians be-

Conversi	on Fa	ctor
To convert from	to	multiply by
sq. ft	m²	0.0929

cause physical presence is required on site during the study period. This study is, however, valid when considering the eight items because it begins the process toward understanding the critical trip characteristics of the gas/convenience land use.

The third item, trips by purpose, leads to the major difference in collecting trip generation data for gas/convenience sites versus most other land uses. The variables involved in this land use are number of pumps and building size. These two items vary by site and have an influence on the site trip generation. In order to assign trip rates to both of these variables, each trip must be defined as a gas only, convenience only, or combined trip. This determination is made by observing the occupants of each vehicle as they enter and exit the store. Physical site presence and attentiveness are required to track all of each vehicle's occupants. The criteria used to make the trip purpose determination were as follows. A trip was determined to be a gasonly trip if a vehicle's occupant(s) pumped gas and did not leave the store with grocery items. Trips in which a vehicle entered the site and did not pull up to the pumps were considered convenience- (grocery) only trips. If a vehicle's occupant(s) pumped gas and one or more of the occupants left the store with grocery items, the trip was considered a combination trip. By determining the trip purpose, an assignment of the trips to the two site variables was possible. Gas/convenience sites cannot be studied simply by mechanical means.

Study Procedures

An overview of specific criteria used in this study is discussed here:

- Each site was studied for one afternoon peak-hour period (4-6 P.M.).
 These studies were performed Tuesday through Thursday so that the traffic variations commonly experienced on Monday and Friday would not affect the results.
- To ensure that the hour of data selected for later analysis at each site matched the actual afternoon peak hour of the adjacent roadway, 15-minute machine counts were taken on the adjacent major road. These counts were taken from approximately 3:30 to 6:15 P.M. on the same day the manual

site counts were performed.

- Actual location of the survey vehicle was within public right-of-way. Attempting to get permission from each local owner/operator to enter the site would have been very time consuming and would not have greatly increased the validity of the study results.
- Manual counts were taken in 15-minute intervals from 4 to 6 P.M. These included driveway (in/out) and trip purpose (gas, convenience, or both) counts.
- It became apparent that occupants
 from 100 percent of the vehicles using
 the site could not be accurately
 watched or their purpose determined.
 Classification of trip purpose for most
 of the sites ranged from 30 percent to
 50 percent of the total site trips for the
 peak hour.

Collecting only that data actually needed and available allowed each site to be studied quickly and easily. The counts at each site took 7-8 person-hours (3.5-4 hours per person) to complete. This included travel time, machine counter setup and take down, and the actual 4-6 P.M. manual count time. Each site required two persons. This allowed one person to count only the driveway volumes and the other to devote complete attention to the task of trip purpose classification. By using these parameters. studies of this type can be performed on a spare-time basis and still yield the needed data.

Data Analysis

The analysis of the data collected included both standard and non-standard trip generation calculations. The collected data classified a sampling of the site trips by purpose. The gas-only and convenience-only trips could be converted to generation rates using standard calculations. These sites, however, also include a combined category for those trips utilizing both the gas and convenience aspects of the site. To distribute these trips to one of the two site variables so that trip rates could then be calculated, the following assumption was used: Assume that the gas availability had a trip attraction (pull) to the site equal to its relative percent of "gasonly" trips when compared with the "convenience-only" trips. Likewise, the convenience site attraction was equal to

its "convenience-only" percent relative to the "gas-only" trips.

An example is presented in Table 1. Site LC4 (Newman's/Fowler) had adjusted counts of 45 gas-only and 82 convenience-only trips for the peak hour of the adjacent road. Relating this to the assumption, there were a total of 127 "only" trips to this site. The split of these "only" trips was 45/82 (35%/ 65%). The combination (both) trips were distributed using the percentage split of the "only" trips. For this site, the both trips were distributed in the 35/ 65% split to the gas-only and convenience-only categories, respectively. The total 27 combined trips yielded an additional 10 trips to the gas column and 17 trips to the convenience column. These adjusted totals were then related to their standard unit of number of pumps for gas and thousand square feet (KSF) for convenience. This yielded the trip generation rates relative to both site varia-

It has been suggested that the volume of the adjacent roadway should be factored into trip generation calculations. This was not done for three reasons. First, the volume of the adjacent roadway does not enter into any other trip generation calculations. The adjacent road volumes only become important when site impact calculations are made relative to road capacity and site capture. Second, all sites studied were established, successful businesses. We reasoned that a site would not be functioning if the company or owner did not feel that it would be successful, thus qualifying the site to be included in the database. Finally, no apparent correlation between the adjacent road volume and the trip rates was found. For example, site L11 (Super America) on S.R. 78 had 260 total site trips while site L10 (7-11), also on S.R. 78, had only 106 total site trips. Both are on the same road, but generate traffic much differently. Also, site PB4 (Stop-n-Go) is located at one of the busiest intersections in Palm Beach County, yet it generated relatively little traffic. We strongly feel, and the data support, that the importance of the amount of adjacent roadway volume, relative to this database, is not

Table 1 presents the data collected for each of the 18 sites studied. The site characteristics noted in the table include

Sile	Site Identification	Che	Site oracle		No.	Bldg. Stee	T Print()	Ren		Stie		Actius	ed		Total	Trip R	colors
No.	Store Name/Location	A	8	C	Pumps	(sq. ft.)	Gas	Both	Conven	Trips	Gas	Both	Conven	Gas		T/Pump	
Coll	er County									7						ar drift	17114
CC1	Super America/Pine																
	Ridge	•	- *	•	12	4750	42	43	119	342	70	72	199	-			
CCS	Super America/Airport	•	•	•	12	4750	26	26	58	248	69	59	131	89	253	243	53.2
Lee	County									~~0	UV	37	131	77	171	6.40	36.1
tC1	Super America/Gottview	•	•	•	12	4230	26	19	27	168	61	44	49				
LC2	Newman's/Pondella		_		6	1914	13	5	12	70	30	12	63	82	86	6.87	20.2
LC3	Chevron/Crystal		_		10	352	13	8	9	76	33	20	28	36	34	6.07	126
LC4	Newman's/Fowler	_			6	2400	15	9	27	154	45		23	45	31	4.49	88.3
LC5	Super America/Lehigh	٠	•		12	4136	33	23	54	225	67	27	82	55	99	9.17	41.3
LC6	Handy Food/Lehigh		_		8	2700	16	6	50	170	38	47	110	85	140	211	33.8
LC7	Mobil Mart/College		_	•	12	816	63	17	29	239	138	37	118	41	129	5.15	477
LCS	Mobil Mart/Crystal				12	912	34	9	17	138	75		64	164	75	13.64	923
LC9	Racetrac/Daniels	_			a	1925	12	16	19	249	64	22	41	89	49	243	53.6
L10	7-11/Sr 78		_		4	2640	2	3	46	106	04	85	101	96	153	12.05	79.3
111	Super America/SR 78				12	4185	26	22	42	260	4	6	96	4	102	1.10	38.5
Palm	Beach County				-	-100	40	4.4	42	200	75	64	121	99	161	8.28	38.4
PB1	Gulf Food Mart/Congress		20.00		9	697	34	10									
PB2	7-11/Congress				4	2805	16	14	59	109	76	22	11	95	.14	10.56	20.0
P83	Food Mart/Forest Hill	_		4	10	1632	25	9		230	41	36	152	49	181	12.27	64.5
PB4	Stop-n-Go/Military Ter.	_	_	•	A	2535	9	4	41 37	135	45	16	74	51	84	5.11	51.4
P85	Step Saver/Forest Hill	_	-		8	2700	22	4		89	16	7	66	17	72	218	28.2
	Sytional Chain B - Diseal A	100				2700	22	/	33	116	41	13	62	46	70	5.80	25.8

A = National Chain. B = Diesel Available. C = Air. Water. Phone Available. * = Yes. - = No.

information relative to the store being a national chain; the site having diesel fuel available; and whether air, water, and phone(s) were present. These variables were used as sorting criteria to better characterize the trip rates. Although these characteristics did yield different trip rates, some results need to be further defined through comparison with additional data.

The number of pumps was defined as the number of vehicle stations available. For example, if a pump island contains one pump that can be accessed simultaneously by vehicles from both sides, then it would be counted as two pumps. Therefore, a site having three pump islands with two pumps each (one for each of two grades of gas), which can be used from both sides simultaneously, would be defined as having six pumps.

The building size represents an exterior measurement. Although it does not represent the exact size of the building, small variations in this value have little or no effect on the final results. These site variables were used to later obtain trip rates.

The raw and adjusted counts for the afternoon peak hour are also listed in Table 1. These represent the sampling results of the trip purpose classification. Site trips are defined as the total site

peak-hour trip ends (in plus out). Although directional split data are not presented here, it varied little from the expected 50/50% split. The adjusted columns of counts are a breakdown of the total site trips by purpose. For example, site LC8 (Mobil Mart/Crystal) had 31 of the sampled trips for gas only and total site trips of 138. When this gasonly value is compared with the total sampled value of 57 trips and then related to the 138 site trips, an adjusted gas-only value of 75 is obtained. The adjustments are standard for trip generation calculations.

The values shown in the total gas and convenience columns of Table 1 were generated based on the assumption discussed earlier. That is, the both (combined) trips were split into the gas and convenience totals relative to the attractiveness of the gas-only and convenience-only adjusted values. These values were then divided into the site variables. The results are the afternoon peak-hour trip generation rates for gas/convenience store sites.

Further analysis was then performed on the trip rates based on the different site characteristics observed. A summary of these results is given in Table 2. These values include an average of the 18 site trip rates resulting in average trip

rates of 7.28 trips per pump and 46.1 trips per KSF of building. Although these overall values are valid, sortings based on the three site characteristics were performed that suggest a valuable further classification of rates. These values show variation in the with and without trip rates, which indicate that the presence of certain site characteristics does affect the ultimate site trip total. For example, a national chain appears to generate more trips for both site variables. This equates to approximately 1.28 trips per pump and 7.4 trips per KSF. These variations should be applied to a site impact analysis to more realistically assess its impacts. The values based on these site characteristics sortings should be used with caution. In certain instances, the sample sizes are too small to be reliable or to draw any specific conclusions. This specifically applies to characteristic C, which was not shown in Table 2. This type of data sorting does, however, represent an attempt to further understand the different items affecting trip rates.

Table 2 also shows the results of other data sortings relative to the location and physical site variables. The sites are located in three Florida counties. As shown in Table 2, trip rates for the different counties vary from 6.92 to 7.40 for

Table 2. Trip Generation Rate Summary

	Trip Ro	otes
Parameters	T/Pump	T/KSF
Trip Generation Averages (all 18 sites)	7.28	46.1
Soried Trip Generations Averages Characteristic "A"		-
No	6.50	41.6
Yes	7.78	49.0
Characteristic "B"		
No	7.15	
Yes	7.54	
Location Averages by County		
Coller County	6.92	44.7
Lee County	7.40	50.1
Palm Beach County	7.18	38.0
Building Size Averages (sq. ft.)		
<1000	_	63.6
1000-3000		43.8
>3000	nimen.	36.3

trips/pump and from 38.0 to 50.1 for trips/KSF. This further reinforces the need for local trip generation data (when available) versus the use of nationwide averages. Data sorting based on the number of pumps did not yield any strong conclusions and was therefore not shown in the table. The data sorted based on building size do indicate that a threefold categorization may be appropriate. These would be for buildings under 1 KSF, between 1 and 3 KSF, and those over 3 KSF. These different groups produced quite different trip rates, with the smaller categories having higher trip rates. Once again, this type of further focusing of the trip generation characteristics will allow site impacts to be more accurately assessed.

Conclusions

Trip generation rates relative to the two site variables were obtained from this study. These rates show that the gas/convenience site generates traffic varying relative to its number of pumps, building size, and site characteristics. The calculations leading to the trip rates were shown (Table 1) and explained. These rates were determined using an assumption of trip attractiveness of the two site variables, which allowed for the analysis of these mixed-use sites. The rates were then sorted relative to the factors listed previously to better understand the trip

generation characteristics of this land use. The data strongly suggest that different sites do generate different amounts of traffic and that variability can be somewhat categorized. By performing these sortings, better values can be achieved, which will then lead to much better site impact analysis.

Many items require additional study, including site capture and pass-by traffic rates, as well as other items mentioned earlier. Those attempting to collect capture data should be aware that because trip rates must address two independent site variables, so must the capture rates.

For instance, the capture percentage for gas may be "x" and for convenience "y." These percentages must also address the combined (both) trips. It would be expected that capture rates would vary greatly and be dependent on many of those items that influence trip rates.

This study was performed to better our understanding of the trip characteristics of these popular sites. By collecting, analyzing, and using local data, we may more accurately project the traffic impacts of land uses on our road networks.

References

- 1. Florida Section Institute of Transportation Engineers, Trip Generation Subcommittee. Trip Generation Data Collection Procedures Manual. Draft report. West Palm Beach, Fl.: ITE Florida Section, April
- 2. Institute of Transportation Engineers. Trip Generation, 4th Ed. Washington D.C.: institute of Transportation Engineers, 1987.



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Pass-By Trips and Diverted Linked Trips Weekday, p.m. Peak Period **Table 5.30**

Land Use 945-Gasoline/Service Station with Convenience Market

	L										
= = =	VEHICLE FUELING POSITIONS	LOCATION	WEELCDAY SURVEY DATE	NO. OF INTERVIEWS	TIME	PRIMARY TRIP (%)	NON-PASS- BY TRIP (%)	DAVERTIED LINKED TRIP (%)	PASS-BY THIP (%)	ADJ. STREET PEAK HOUR VOLUME	SOURCE
	8	Louisville area, KY	1993	83 4:0	83 4:00-6:00 p.m.	80	1	40	52	4,965	Barton-Aschman Assoc
	æ	Louisville, KY	1993	60 4:0	60 4:00-6:00 p.m.	20		27	53	1,491	Barton-Aschman Assoc
I =	10	Louisville, KY	1993	n/a 4:0	n/a 4:00-6:00 p.m.	19	I	24	57	1.812	Barton-Aschman Assoc
1 ~	8	Louisville area, KY	1993	n/a 4:C	n/a 4:00-6:00 p.m.	7		21	72	2.657	Barton-Aschman Assoc
7	10	Louisville area, KY	1993	n/a 4:C	n/a 4:00-6:00 p.m.	16		29	55	2.657	Barton-Aschman Assoc
1~	8	Silver Spring, MD	1992	36 4:0	4:00-6:00 p.m.	14	Ē	19	67	3,095	RBA
	89	Derwood, MD	1992	46 4:0	46 4:00-6:00 p.m.	1		43	46	3.770	BBA
~	8	Kensington, MD	1992	31 4:0	31 4:00-6:00 p.m.	13		35	52	1,785	BBA
, w	8	Silver Spring, MD	1992	35 4:0	4:00-6:00 p.m.	3	î	43	54	7,080	RBA

0 US 1 2 Atlantic Blud 1,00 = 1,176 17.6%

2451 = Bchemo/Gesparille

3 USI & OCEGA Drive

1.15 = 1.353 35.340

· Peak Season

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SIGNALIZED INTERSECTION ANALYSES

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						S	HORT	REPC	RT	•					
General info	ormation							Site I	nformat	ion					
Analyst Agency or C Date Perforr Time Period	ned 6/6/2008							Area [*] Jurisd		All Exi	1 & Tarp other area sting Con sting Con	as dition	s		
Volume and	Timing Input	:	·												
					В			WB			NB			SB	
Manuel an est		_	LT	_	Ή	RT	LT	TH	RT	LT	TH	RI	_	TH	RT
Number of L	anes		0	1	-	1	0	1	1	1	2	1	1	2	0
Lane Group		-		L'	-	R		LT	R	L	T	R	L	TR	-
Volume (vph	·		7	8	_	7	209	10	93	1	976	200	86	1020	12
% Heavy Ve	nicies	_	0	0	_	0	0	0	0	0	0	0	0	0	0
		_	64	0.6	-	0.64	0.97	0.97	0.97	0.95	0.95	0.95		0.90	0.90
Pretimed/Ac			4	A		A	Α	A	A	A	P	P	A	P	P
Startup Lost				2.		2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	₩
	Effective Gree	en l		2.		2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	ļ
Arrival Type		-		3		3		3	3	3	3	3	3	3	
Unit Extension		+		3.	_	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	<u> </u>
Ped/Bike/RT	OR Volume	- 4	,	0	_	0	0	0	28	0	0	41	0	0	0
Lane Width	da (Daddaa	+.	,	12		12.0	A.f	12.0	12.0	12.0	12.0	12.0	_	12.0	
Parking/Grad		^	<u> </u>	0		N	N	0	N	N	0	N	N	0	N
Bus Stops/H		+		0		0		0	0	0	0	0	0	0	-
•	destrian Time	+		3.		U		3.2	U	-	3.2	-		3.2	-
Phasing	EW Perm	-)2	J.,		03)4	Excl. L	eft l	NS Perm	1	07)8
	G = 23.0	G =	-		G≃		G=	, ,	G = 8.0		G = 44.0	_) =	G=	,0
Timing	Y = 6	Y =			Υ=		Y =		Y = 3		Y = 6		′ =	Y =	
	nalysis (hrs) =										Cycle Le	ngth (c = 90.0		
Lane Grou	up Capacity	<u>, Co</u>	ontro			y, and	LOS		ninatio	on					
		-			EB		1	WB	,		NB			ŞB	
Adjusted Flo	w Rate			2	4	11		225	67	1	1027	167	96	1146	
Lane Group	Capacity			41	17	413		349	413	301	1769	790	339	1765	
v/c Ratio				0.0) 6	0.03		0.64	0.16	0.00	0.58	0.21	0.28	0.65	
Green Ratio	<u> </u>			0.2	26	0.26		0.26	0.26	0.64	0.49	0.49	0.64	0.49	
Uniform Dela	y d ₁			25	i. <i>3</i>	25.1		29.9	26.0	8.7	16.4	13.1	8.6	17.2	
Delay Factor	k			0.	11	0.11		0.22	0.11	0.11	0.50	0.50	0.11	0.50	
Incremental	Delay d ₂			0	.1	0.0		4.1	0.2	0.0	1.4	0.6	0.5	1.9	
PF Factor				1.0	000	1.000		1.000	1.000	1.000	1.000	1.00	0 1.000	1.000	
Control Dela	y			2	5.4	25.1	Ì	33.9	26.2	8.7	17.8	13.7	9.1	19.1	
Lane Group	LOS			7	;	С		С	С	Α	В	В	Α	В	
Approach De	lay			2	5.3			32.2			17.2			18.3	
Approach LC	s			(С			С		1	В			В	
Intersection I		\top		-	9.4				Intersed	tion L				В	
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						S	HORT	REPC	RT	-				::		
General Info	ormation								nformati	on						
Analyst Agency or C Date Perform Time Period	ned 6/6/2008							Area Junsd		Al. 20	ot 109	& Tarpo ther area Withou Withou	as t Site	in Dr		
Volume and	Timing Inpu	<u> </u>										-		IELU		
		П			В			WB				NB			SB	
NI			LT		Ή	RT	LT	TH	RT	LŢ	_	TH	RT	LT	TH	RT
Number of L	anes	4	0	1	\rightarrow	1	0	1	1	1	_	2	1	1	2	0
Lane Group		4		L	_	R		LT	R	L		Τ	R	L	TR	
Volume (vph		4	8	g	\rightarrow	8	249	12	111	1	_	1347	238	103	1408	14
% Heavy Ve	hicles	4	0	0	-	0	0	0	0	0		0	0	0	0	0
PHF		4	0.64	0.6	\rightarrow	0.64	0.97	0.97	0.97	0.95	;	0.95	0.95	0.90	0.90	0.90
Pretimed/Ac		4	Α	A	\rightarrow	Α	Α	Α	Α	Α		Р	P	A	P	P
Startup Lost		_		2.		2.0		2.0	2.0	2.0		2.0	2.0	2.0	2.0	
Extension of	Effective Gree	n		2.	0	2.0		2.0	2.0	2.0		2.0	2.0	2.0	2.0	
Arrival Type		\perp		3		3		3	3	3		3	3	3	3	<u></u>
Unit Extension	on			3.	0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Ped/Bike/RT	OR Volume		0	0		0	0	0	28	0		0	41	0	0	0
Lane Width		\perp		12	.0	12.0		12.0	12.0	12.0)	12.0	12.0	12.0	12.0	
Parking/Grad			Ν	0		Ν	Ν	0	Ν	N		0	N	N	0	N
Parking/Hou		4														
Bus Stops/H		4				0		0	0	0		0	0	0	0	
	destrian Time			3.	_			3.2		L		3.2			3.2	
Phasing	EW Perm	G	02			03	_	4	Excl. L		_	NS Perm	_	07	_	8
Timing	G = 23.0 Y = 6	Y			G = Y =		G =		G = 8.0 $Y = 3$			= 44.0 = 6	G :		G = Y =	
Duration of A	nalysis (hrs) =				Ė	5,0					_	ycie Ler				
Lane Grou	up Capacity	, C	Contro	J Ic)eia	y, and	LOS	Deterr	ninatio	n						
					EB			WB				NB			SB	
Adjusted Flo	w Rate			T_2	7	13		269	86	1		1418	207	114	1580	
Lane Group				+-)5	413		348	413	244		1769	790	244	1766	
v/c Ratio				0	07	0.03		0.77	0.21	0.00		0.80	0.26	0.47	0.89	
Green Ratio		-		-	26	0.26	 	0.26	0.26	0.64		0.49	0.49	0.64	0.49	
Uniform Deta	ny d			+	5.4	25.1	+	31.1	26.3	14.3		19.3	13.5	14.0	20.9	
Delay Factor	· ·		-	0.		0.11	-	0.32	0.11	0.11		0.50	0.50	0.11		
Incremental I				+			+	+	\leftarrow	-					0.50	
	Jonay u ₂		-	-	0.1	0.0	 	10.3	0.3	0.0		3.9	0.8	1.4	7.5	
PF Factor				_	000	1.000	+	1.000	1.000	1.00		1.000	1.000	1.000	1.000	
Control Dela				-	5.4	25.2	1	41.4	26.6	14.	3	23.3	14.3	15.4	28.4	
Lane Group 1				-	- 1	С	 	D	C	В		С	В	В	С	
Approach De					5.4		4—	37.8		_		22.1			27.5	
Approach LC	S		<u> </u>		С		<u> </u>	D		L_		С			С	
Intersection !	Delay		<u></u>	2	6.1				intersec						С	
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Short Report Page 1 of 1

					S	HORT	REPO	RT		,				
General Info	ormation							nformat	ion					
Analyst Agency or C Date Perfor Time Period	med 6/6/2008						Area Junso	ection Type liction sis Year	Al/ 20	31 & Tarp other are 09 With S 09 With S	as ite	n Dr		
Volume and	Timing Inpu	t					•							
				EB			WB			NB			SB	
Number of L		LT	+	TH_	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
	anes	0	٠,	1 T	1	0	1	1	1	2	1	1	2	0
Lane Group		 	-		R	0.40	LT	R	L	T 4050	R	L 100	TR	144
Volume (vph	<u> </u>	8	_	9	8	249	12	111	1	1353	238	103	1414	14
% Heavy Ve PHF	nicies	+	-	.64		0	0	Ť	0	0	Ť	0	0	0
	tunted (DIA)	0.64	_		0.64	0.97	0.97	0.97	0.95	0.95	0.95	0.90	0.90	0.90
Pretimed/Ac Startup Lost		A	-	A	A 2.0	Α	A	A	A	P	P	A	P	P
	I Ime Effective Gre	20	_	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	
	Effective Gre	en	_				2.0						ļ	├──
Arrival Type Unit Extension	20	+		3	3 3.0	<u> </u>	3	3.0	3	3	3	3	3	├—
		 		2.0			3.0		3.0	3.0	3.0	3.0	3.0	
Ped/Bike/RT Lane Width	OR Volume	0	-	0	0	0	0	28	0	0	41	0	0	0
Parking/Grad	de/Darkina	l N	_	2.0 0	12.0 N	N	12.0	12.0 N	12.0 N	12.0	12.0 N	12.0	12.0	N
Parking/Hou		11/4	┿	0	//	//		//	- /V	+ -	I N	1/4	-	1 //
Bus Stops/H			+	0	0		0	0	0	0	0	0	0	\vdash
	destrian Time		_	.2	<u> </u>		3.2	Ū		3.2	<u> </u>	ı.v.	3.2	
Phasing	EW Perm	02		T	03)4	Excl. L	.eft	NS Perr	n	07		08
Timing	G = 23.0	G=		G=		G=		G = 8.	0	G = 44.0			G=	
	Y = 6 \nalysis (hrs) =	Y =		Υ =	:	Y =		Y = 3		Y = 6 Cycle Le	Y =		Y =	
	up Capacity		roi	<u>L</u>	v and	LLOS	Deten	minatio		Cycle Le	ngin C -	- 30.0		
Laile Glo	ap capacit	,, <u>J</u>	101	EB	iy, and	1	WB	milaus	T	NB			SB	
Adimeted Flo	D-4-		Т		Lao		_	T		1424	1007		1587	
Adjusted Flo	w reate	\perp	<u> </u>	27	13	↓	269	86	1		207	114		
Lane Group	Capacity		4	105	413		348	413	244	1769	790	244	1766	
v/c Ratio			0	.07	0.03		0.77	0.21	0.00	0.80	0.26	0.47	0.90	
Green Ratio			0	.26	0.26		0.26	0.26	0.64	0.49	0.49	0.64	0.49	
Uniform Dela	ay d ₁		2	5.4	25.1		31.1	26.3	14.4	19.4	13.5	14.1	21.0	
Delay Factor	k		0	.11	0.11		0.32	0.11	0.11	0.50	0.50	0.11	0.50	
Incremental	Delay d ₂			0.1	0.0		10.3	0.3	0.0	4.0	0.8	1.4	7.7	
PF Factor			1	.000	1.000		1.000	1.000	1.00	0 1.000	1.000	1.000	1.000	
Control Dela	у		1	25.4	25.2		41.4	26.6	14.5	23.4	14.3	15.5	28.7	
Lane Group	LOS			С	С		D	С	В	С	В	В	С	
Approach De	elay		2	25.4		1	37.8	•		22.2			27.8	-
Approach LC	S			С		†	D		1	С			С	
Intersection			2	26.3				Intersec	ction L				С	
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UNSIGNALIZED INTERSECTION ANALYSES

		O-WAY STOP	CONTR	OL 3	CIALLA	IANI			
Generai informatio	n		Site i	nforn	natio	n			
Analyst	RPE/CE	0	Interse	ection			US 1 & B	lackwater	Lane
Agency/Co.			Junisdi	iction		•			
Date Performed	6/6/2008		Analys	sis Yea	ar		Existing (Conditions	
Analysis Time Period	Midday P	Peak							
	om Thumb MM	104.5							
East/West Street: Blac			_			: US 1			
ntersection Orientation:	North-South		Study I	Period	(hrs):	0.25			
Vehicle Volumes a	nd Adjustme	ents							
Major Street		Northbound					Southbou	ınd	
Movement	1	2	3			4	5		6
	L	T	R			L	T		R
/olume (veh/h)	32	760					920		13
Peak-Hour Factor, PHF	0.91	0.91	1.00			1.00	0.91		0.91
Hourly Flow Rate, HFR veh/h)	35	838	0			0	1009		14
Percent Heavy Vehicles	0					0			
Median Type				Raise	d curt)			
RT Channelized			0						0
anes	1	2	0			0	2		0
Configuration	L	T	<u> </u>				T		TR
Jpstream Signal		0					0		
Minor Street		Eastbound					Westbou	nd	
Movement	7	8	9			10	11		12
	L	T	R			L	T		R
/olume (veh/h)	13		40			···			
Peak-Hour Factor, PHF	0.70	1.00	0.70		1	1.00	1.00		1.00
lourly Flow Rate, HFR veh/h)	18	0	57			0	0		0
Percent Heavy Vehicles	0	0	0			0	0		0
Percent Grade (%)		0					0		
Flared Approach		N					N		
Storage		0					0		
RT Channelized	1		0				<u> </u>		0
anes	1	0	1			0	0		0
Configuration	L		R				†		
Delay, Queue Length, a	nd Level of Se	rvice							
pproach	Northbound	Southbound	١	Westbo	ound	·	1 .	Eastbound	
Novement	1	4	7	8		9	10	11	12
ane Configuration	L	T	· ·			<u> </u>	L	- ' '	R
(veh/h)	35						18		57
(veri/ii) (m) (veh/h)	686				\dashv		+		+
		_			-		346		671
//C	0.05						0.05		0.08
5% queue length	0.16						0.16		0.28
Control Delay (s/veh)	10.5						16.0		10.9
os	В						С		В
opproach Delay (s/veh)	••							12.1	

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	Į V	VO-WAY STOP	CONTR	OL 2	OWI	WART			
General Informatio	n		Site i	nform	natio	on			
Analyst	RPE/CE	D	Interse	ection			US 1 & E	Blackwater	Lane
Agency/Co.			Jurisdi						
Date Performed	6/6/2008	3	Analys	sis Yea	ar		2009 Wit	hout Site	
Analysis Time Period	Midday	Peak							
Project Description T									
East/West Street: Blac	kwater Lane		North/S	South	Stree	t: US 1			
Intersection Orientation	North-South		Study I	Period	(hrs)	: 0.25			
Vehicie Volumes a	nd Adiustm	ents							
Major Street		Northbound			1		Southboo	ınd	
Movement	1	2	3			4	5	1110	6
		T	R			Ĺ	T		R
Volume (veh/h)	38	1050					1269		15
Peak-Hour Factor, PHF	0.91	0.91	1.00)		1.00	0.91		0.91
Hourly Flow Rate, HFR (veh/h)	41	1158	0			0	1392		16
Percent Heavy Vehicles	0	-				0	_		
Median Type				Raise	d cur	b	- I		
RT Channelized			0						0
anes	1	2	0			0	2		0
Configuration	L	T					T		TR
Jpstream Signal		0			\vdash	· ·	0		
Minor Street		Eastbound					Westbou	nd	
Movement	7	8	9		<u> </u>	10	11	1	12
	L	Т	R			L	T		R
/olume (veh/h)	15		47						- 13
eak-Hour Factor, PHF	0.70	1.00	0.70			1.00	1.00		1.00
lourly Flow Rate, HFR veh/h)	21	0	67			0	0		0
Percent Heavy Vehicles	0	0	0			0	0		0
Percent Grade (%)		0					0		
lared Approach		N	T				N		
Storage		0			_		0		-
RT Channelized			0				+ -		0
anes	1	0	1			0	-	-	
Configuration	'		R			U	0		0
Delay, Queue Length, a		navios	1 7						
oeiay, Queue Length, i	Northbound	Southbound	,	Alasti			1 -	- a sth	
				Vestb	_			Eastbound	· ·
Novement	1	4	7	8		9	10	11	12
ane Configuration	L						L	<u></u>	R
(veh/h)	41						21		67
(m) (veh/h)	491]		245		557
/c	0.08						0.09		0.12
5% queue length	0.27						0.28		0.41
Control Delay (s/veh)	13.0						21.1		12.3
os	В						С		B
pproach Delay (s/veh)							 	14.4	1 0
Approach LOS	••					.	-		
operated 2005 University of F	L							В	

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General Informatio	n		Site in	format	lon			
Analyst	RPE/CE	D	Intersed	tion		US 1 & E	Blackwater	Lane
Agency/Co.			Jurisdic					
Date Performed	6/6/2008		Analysi	s Year		2009 Wit	h Site	
Analysis Time Period	Midday F	Peak						
	om Thumb MM	104.5						
East/West Street: Black			North/S	outh Stre	et: US 1	•		
ntersection Orientation:	North-South		Study P	eriod (hr	s): 0.25			
Vehicle Volumes a	nd Adjustme	ents			·			
Major Street		Northbound				Southboo	ınd	
Movement	1	2	3		4	5		6
	L	T	R		L	T		R
Volume (veh/h)	38	1056	100			1276		15
Peak-Hour Factor, PHF	0.91	0.91	1.00		1.00	0.91		0.91
lourly Flow Rate, HFR veh/h)	41	1165	0		0	1400		16
Percent Heavy Vehicles	0				0			
Median Type				Raised cu	urb			
RT Channelized			0					0
anes	1	2	0		0	2		0
Configuration	L	T				T		TR
Jpstream Signal		0				0		JU
Minor Street		Eastbound				Westbou	ind	
Movement	7	8	9		10	11		12
	L	Т	R		L	T		R
/olume (veh/h)	15		47					
Peak-Hour Factor, PHF	0.70	1.00	0.70		1.00	1.00		1.00
Hourly Flow Rate, HFR (veh/h)	21	0	67		0	0		0
Percent Heavy Vehicles	0	0	0		0	0		0
Percent Grade (%)		0				0		
lared Approach		N				N		
Storage		0				0		
RT Channelized			0					0
anes	1	0	1	\neg	0	0		0
Configuration	L		R					*
Delay, Queue Length, a	nd Level of Se	ervice						
Approach	Northbound	Southbound	V	/estboun	d		Eastbound	
/lovement	1	4	7	8	9	10	11	12
ane Configuration	L				1	L		R
(veh/h)	41		-		+	21		67
(voi.//) (m) (veh/h)	487					243		555
/c	0.08				 			
					1	0.09		0.12
5% queue length	0.27					0.28		0.41
Control Delay (s/veh)	13.1					21.2	<u> </u>	12.4
os	В					С		В
pproach Delay (s/veh)		*-					14.5	
pproach LOS							В	

One and Information			CONTR	4				
General Informatio				nformat	Ion			
Analyst	RPE/CEI)	Interse			US 1 & T	aylor Dri	VO
Agency/Co.			Junsd			1		
Date Performed	6/6/2008	No. of the last of	Analys	sis Year		Existing of	condition	s
Analysis Time Period	Midday F							
Project Description To		5	61 11 11					
ast/West Street: Tay/		·····		South Stre				
ntersection Orientation:			Study	Period (hr:	s): 0.25			
/ehicle Volumes a	<u>nd Adjustme</u>							
fajor Street		Northbound				Southbou	ınd	
Movement	1 1	2	3		4	5		6
(al see Asset Asset		T	R		L	T		R
/olume (veh/h)	1.00	876	12		16	952		4.00
Peak-Hour Factor, PHF Hourly Flow Rate, HFR	1.00	0.87	0.87		0.82	0.82	-	1.00
veh/h)	0	1010	13		19	1156		0
ercent Heavy Vehicles	0	_			0			_
/ledian Type				Raised cu	ırb			
RT Channelized			0					0
anes	0	2	0		1	2		0
configuration		T	TR		L	T		
Ipstream Signal		0				0		
linor Street		Eastbound				Westbou	nd	
Novement	7	8	9		10	11		12
	L	Т	R		L	T		R
/olume (veh/h)					7			16
eak-Hour Factor, PHF	1.00	1.00	1.00		0.57	1.00		0.57
lourly Flow Rate, HFR veh/h)	0	0	0		12	0		27
ercent Heavy Vehicles	0	0	0		0	0		0
ercent Grade (%)		0	•			0		
lared Approach		N				N		
Storage		0				0	$\overline{}$	
RT Channelized			0			<u> </u>		0
anes	0	0	0	-	1	0	_	1
Configuration	1		1		<u>L</u>	† <u>*</u> -	_	R
elay, Queue Length,	and Level of Se	rvice	*					
pproach	Northbound	Southbound	1	Vestboun	d		Eastboun	ıd
lovement	1	4	7	8	9	10	11	12
ane Configuration	-	L	L	Ť	R	 '	<u> </u>	12
(veh/h)		19	12		27		1	_
(m) (veh/h)		686	330	-	671			
/c		0.03	0.04		0.04			
5% queue length					-		-	
		0.09	0.11		0.13		<u> </u>	+
ontrol Delay (s/veh)		10.4	16.3		10.6		<u> </u>	
os		В	С		В			
pproach Delay (s/veh)				12.4				
pproach LOS				В				

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General information)n		Site I	nformati	on			
Analyst					<u> </u>	140 4 6 7	- 1 5	
Agency/Co.	RPE/CE		Inters			UST&I	aylor Driv	/8
Date Performed	6/6/2008	,				10000		-
Analysis Time Period	Midday I		Analys	sis Year		2009 witi	nout site	_
Project Description T								
ast/West Street: Tay	om mump 104. Ios Drivo	5	Manth #	On the Oten	-h. 110.4			.
ntersection Orientation				South Stree				
			Study	Period (hrs): 0.25			
/ehlcle Volumes a	na Aajustm							
Major Street		Northbound				Southboo	und	
Movement	1	2	3		4	5		6
(aluma (uah/h)	<u> </u>	T 1010	R		L	T		R
/olume (veh/h)	1.00	1218	14		19	1314		
Peak-Hour Factor, PHF dourly Flow Rate, HFR	1.00	0.87	0.87		0.82	0.82		1.00
veh/h)	0	1404	16		23	1596		0
ercent Heavy Vehicles	0				0			
Median Type				Raised cu	rb			
RT Channelized			0					0
anes	0	2	0		1_	2		0
Configuration		T	TR		L	T		
lpstream Signal		0				0		
linor Street		Eastbound				Westbou	nd	
lovement	7	8	9		10	11		12
	L	Т	R		L	Т		R
olume (veh/h)					8			19
eak-Hour Factor, PHF	1.00	1.00	1.00		0.57	1.00		0.57
lourly Flow Rate, HFR /eh/h)	0	0	0		13	0		33
ercent Heavy Vehicles	0	0	0		0	0		0
ercent Grade (%)		0				0		
lared Approach		N				N		
Storage		0	1			0	+	
T Channelized	-		0			 		
	0				4			0
anes onfiguration	0	0	0	_	1	0		1
	nellerelete				L	1		R
elay, Queue Length,		, , , , , , , , , , , , , , , , , , ,		#14b '	1			
pproach	Northbound	Southbound		Westbound	i		Eastbound	
lovement	1	4	7	8	9	10	11	12
ane Configuration		L	L		R			
(veh/h)		23	13		33			
(m) (veh/h)		486	230		554			
'c		0.05	0.06		0.06			
5% queue length		0.15	0.18		0.19			
		12.8	21.6		11.9			
		·	2,7.0	1	11.3		l	
ontrol Delay (s/veh)		ρ	-		P		· · · · · · · · · · · · · · · · · · ·	
ontrol Delay (s/veh) OS		В	С	44.5	В			
Control Delay (s/veh) OS Approach Delay (s/veh) Approach LOS	4-	<i>B</i>	С	14.6	В			

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	TW	O-WAY STOF	CONTR	OL SI	JMMARY					
General Informatio	n		Site I	nform	ation					
Analyst	RPE/CEI)	Interse	ection		US 1 & T	aylor Driv	⁄e		
Agency/Co.			Jurisd	iction						
Date Performed	6/6/2008		Analys	sis Year	Γ.,	2009 with	site			
Analysis Time Period	Midday F	Pead								
	om Thumb 104.	5								
East/West Street: Tayl			North/South Street: US 1							
ntersection Orientation:	North-South		Study	Period ((hrs): 0.25					
Vehicle Volumes a	nd Adjustme	ents								
Major Street		Northbound				Southboo	ınd			
<u>Viovement</u>	1	2	3		4	5		6		
	<u> </u>	Т	R	_	Ļ	Т		R		
/olume (veh/h)		1218	14		25	1314				
Peak-Hour Factor, PHF	1.00	0.87	0.87		0.82	0.82		1.00		
lourly Flow Rate, HFR veh/h)	0	1404	16		30	1596		0		
Percent Heavy Vehicles	0				0					
Median Type				Raiseo	l curb	•				
RT Channelized			0					0		
anes	0	2	0		1	2		0		
Configuration		T	TR		L	T				
Jpstream Signal		0			-	0				
linor Street		Eastbound				Westbou	ınd			
flovement	7	8	9		10	11		12		
	L	T	R		L	Т		R		
/olume (veh/h)					14			19		
Peak-Hour Factor, PHF	1.00	1.00	1.00		0.57	1.00		0.57		
lourly Flow Rate, HFR veh/h)	0	0	0		24	0		33		
Percent Heavy Vehicles	0	0	0		0	0		0		
Percent Grade (%)		0	-			0	-			
lared Approach		N				N				
Storage		0				0				
RT Channelized			0					0		
anes	0	0	0		1	0		1		
onfiguration					L			R		
Delay, Queue Length, a	and Level of Se	rvice	•					···		
pproach	Northbound	Southbound		Westbound			Eastbound			
/lovement	1	4	7	8	9	10	11	12		
ane Configuration		L	L	Ť	R	 	- 	 		
(veh/h)		30	24		33					
(m) (veh/h)		486	226		554	1	†			
/c		0.06	0.11		0.06			1		
5% queue length		0.20	0.35		0.19					
Control Delay (s/veh)		12.9	22.8		11.9	1		+		
.os		В	C		В			1		
Approach Delay (s/veh)				16.5						
pproach LOS				C						
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Conoral Informatio		O-WAY STOP				· · · · · · · · · · · · · · · · · · ·			
General Informatio				nformati	on				
Analyst	RPE/CE)		Intersection			US 1 & Tom Thumb Drive		
Agency/Co.	0.0000	 ,,-		Jurisdiction					
Date Performed	6/6/2008		Analys	is Year		2009 Wit	h Site		
Analysis Time Period	Midday F								
	om Thumb MM		B. 1 11 40						
ast/West Street: Tom		ay		South Stree					
ntersection Orientation:			Study	Period (hrs	3): 0.25				
Vehicle Volumes a	<u>nd Adjustme</u>								
Major Street		Northbound				Southbou	ınd		
Movement	1	2	3		4	5		6	
(alayana (yanla (la)	<u> </u>	T 4000	R		L	Т		R	
/olume (veh/h) Peak-Hour Factor, PHF	1.00	1033	32		4.00	4.00	_	4.00	
tourly Flow Rate, HFR	7.00	0.92	0.92		1.00	1.00		1.00	
veh/h)	0	1121	34		0	0		0	
Percent Heavy Vehicles	0		_		0				
/ledian Type				Undivide		-1			
RT Channelized			0					0	
anes	0	2	0	\neg	0	0		0	
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/lovement	7	8	9		10	11		12	
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/olume (veh/h)								17	
Peak-Hour Factor, PHF	1.00	1.00	1.00		1.00	1.00		0.75	
lourly Flow Rate, HFR veh/h)	0	0	0		0	0		22	
Percent Heavy Vehicles	0	0	0		0	0		0	
Percent Grade (%)	+ -	0		- -		0			
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pproach Delay (s/veh)				10.9	I		<u>_</u>		
יייים או או עבובו ו תיוברותת									

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General Informatio	n		Site In	formation			
Analyst	RPE/CEI	0	Intersec		Taylor Dr	ive & Site	Drive
Agency/Co.			Junsdic				
Date Performed	6/6/2008		Analysis		2009 Witi	h Site	•
Analysis Time Period	Midday F						
Project Description To							
ast/West Street: Taylo			North/Sc	outh Street: Site I	Drive		
ntersection Orientation:	North-South		Study Pe	eriod (hrs): 0.25			
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/olume (veh/h)	0	0			Ö		12
Peak-Hour Factor, PHF	0.60	0.60	1.00	1.00	0.67		0.67
lourly Flow Rate, HFR veh/h)	0	0	0	0	0		17
Percent Heavy Vehicles	0	**		0			-
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Configuration	LT		1				TR
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	L	Т	R	L	T		R
/olume (veh/h)	25		0	_			
Peak-Hour Factor, PHF	0.57	1.00	0.57	1.00	1.00		1.00
fourly Flow Rate, HFR veh/h)	43	0	0	0	0		0
ercent Heavy Vehicles	0	0	0	0	0		0
Percent Grade (%)		0	•		0		
lared Approach		N			T N		
Storage		0			0		
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(m) (veh/h)	1613					1018	
/c	0.00					0.04	
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Generai Informatio	on		Site	informat	tion				
Analyst	RPE/CE	D		ection		11019	Compos	Dood	
Agency/Co.				diction		US 1 & Samson Road			
Date Performed	6/6/2008	3					xisting Conditions		
Analysis Time Period	Midday					Exioning	00114140	173	
Project Description 7	om Thumb 104	.5	ببكالسبب						
East/West Street: San		· · · · · · · · · · · · · · · · · · ·	North/	South Stre	et: US 1				
ntersection Orientation	: North-South			Period (hr			-		
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Major Street		Northbound				Southbo	und		
Movement	1	2	3		4	5	uilu T	6	
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/olume (veh/h)		1085	23		96	1077			
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tourly Flow Rate, HFR veh/h)		1194	25		109	1230		0	
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Configuration		T	TR		L	T			
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Novement	7	8	9		10	11		12	
	L	Т	R		L	T		R	
/olume (veh/h)					32			99	
eak-Hour Factor, PHF	1.00	1.00	1.00	,	0.78	1.00		0.78	
lourly Flow Rate, HFR veh/h)	0	0	0		41	0	\top	126	
ercent Heavy Vehicles	0	0	0		0	0		0	
ercent Grade (%)		0				0			
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ane Configuration	-	L	L	-	R	10	11	12	
(veh/h)		109	41			-			
(m) (veh/h)					126	 	<u> </u>	-	
c (HI) (Veri/II)		579	266		610				
		0.19	0.15		0.21		<u></u>		
5% queue length		0.69	0.54		0.77				
ontrol Delay (s/veh)		12.7	21.0		12.4				
OS		В	С		В				
oproach Delay (s/veh)				14.5					
pproach LOS				В					

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		rwo	-WAY STOP	CONTR	OL SI		WARY				
General Informatio	n			Site i	nform	atio	on				
Analyst	RPEA	CED		Interse	ection			US 1 & S	amson	Road	1
Agency/Co.				Jurisd	ction						
Date Performed	6/6/20	008		Analys	sis Yea	ſ		2009 witi	hout site	,	
Analysis Time Period	Midda	y Pea	ak								
Project Description To	om Thumb 1	04.5			•						
East/West Street: Sam				North/S	South S	Stree	t: US 1				
ntersection Orientation:	North-Sou	ıth		Study	Period	(hrs)	: 0.25				
/ehicle Volumes a	nd Adiust	men	ts						····	· 	
fajor Street			Northbound					Southboo	und		
lovement	1		2	3			4	5			6
	L		Т	R			Ĺ	Т			R
/olume (veh/h)			1485	27			114	1487			
eak-Hour Factor, PHF	1.00		0.91	0.91			0.88	0.88		1.	00
lourly Flow Rate, HFR veh/h)	0		1635	29			130	1699		1	0
Percent Heavy Vehicles	0			_			0				_
ledian Type					Raise	d cur	t)			-	
RT Channelized				0							0
anes	0		2	0			1	2			0
configuration	 		T	TR			L	T			
Jpstream Signal			0		-		_	0			
linor Street		Eastbound				Westbound					
lovement	7		8	9			10	11	110		12
	L		T	R			L	T			R
olume (veh/h)				 			38				18
Peak-Hour Factor, PHF	1.00		1.00	1.00			0.78	1.00		1000	78
lourly Flow Rate, HFR veh/h)	0		0	0			48	0			51
ercent Heavy Vehicles	0		0	0			0	0		-	0
Percent Grade (%)			0					0			
lared Approach			I N					N			••
Storage			0		-			0			
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Pelay, Queue Length, a	nd Lavata	- Ca-	lice.				-				`
pproach	Northboun	_	Southbound	,	Westbo	ام جور رو			Eastbou	nd	
Novement		" 		<u></u>		Juria				IIU I	40
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ane Configuration		+	L 100	L			R			\dashv	
(veh/h)		+	130	48			151			_	
(m) (veh/h)			392	170			491			_	
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Control Delay (s/veh)			18.7	34.3			15.6				
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pproach Delay (s/veh)					20.1	1				_	
pproach LOS		+			C						
pprodor EOG				<u></u>				<u> </u>			

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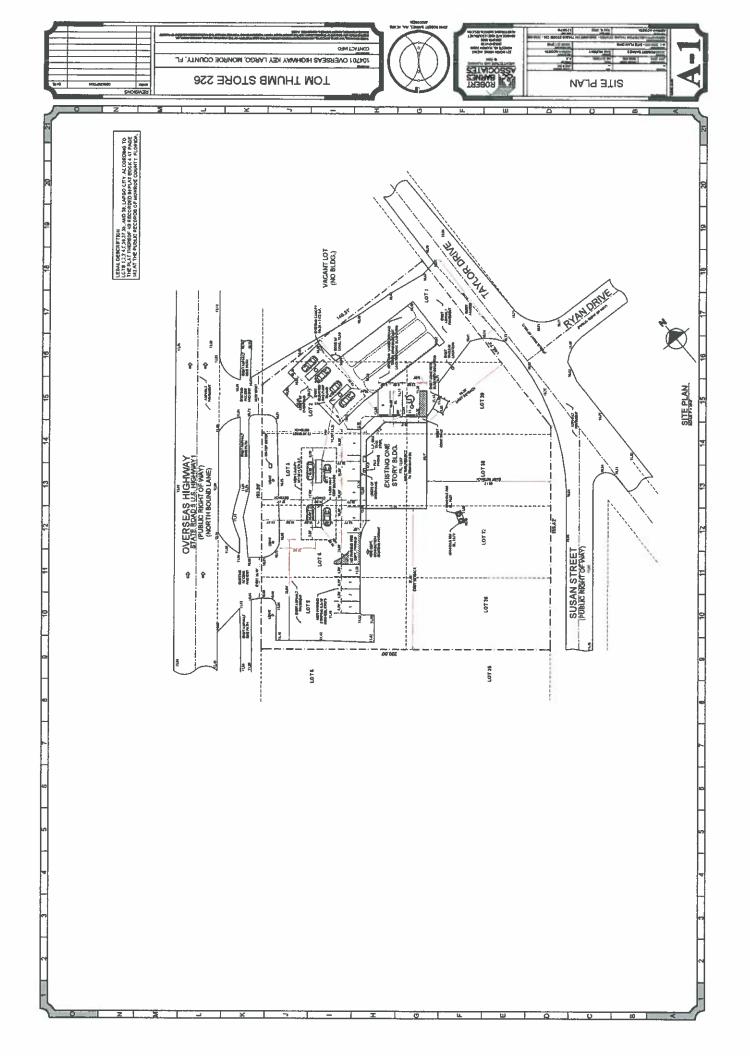
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		O-WAY STOF	_					
General Informatio	ก		Site i	nformat	lon			
Analyst	RPE/CE	D	Interse	ection		US 1 & Samson Road		
Agency/Co.			Junsd	iction				
Date Performed	6/6/2008		Analys	sis Year		2009 witi	h site	
Analysis Time Period	Midday F	Peak						
Project Description To	om Thumb 104.	5	· · · · · · · · · · · · · · · · · · ·	*				
East/West Street: Sam	son Rd		North/	South Stre	et: US 1			
ntersection Orientation:	North-South		Study	Period (hr.	s): 0.25			
/ehicle Volumes a	nd Adiustme	ents						
lajor Street		Northbound				Southboo	und	
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olume (veh/h)		1491	27		114	1493		
eak-Hour Factor, PHF	1.00	0.91	0.91		0.88	0.88		1.00
lourly Flow Rate, HFR /eh/h)	0	1642	29		130	1706		0
ercent Heavy Vehicles	0		_		0			
ledian Type		•		Raised cu				
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10 TOTAL	 	Ť	R		L	T		R
/olume (veh/h)			1		38	<u> </u>		118
eak-Hour Factor, PHF	1.00	1.00	1.00		0.78	1.00		0.78
lourly Flow Rate, HFR					•			
veh/h)	0	0	0		48	0		151
ercent Heavy Vehicles	0	0	0		0	0		0
ercent Grade (%)		0				0		
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elay, Queue Length, a		-		A				
pproach	Northbound	Southbound		Westboun		 	Eastbound	_
lovement	1	4	7	8	9	10	11	12
ane Configuration		L	L		R			ŀ
(veh/h)		130	48		151			
(m) (veh/h)		389	169		489		ļ	
/c		0.33	0.28		0.31			
5% queue length		1.44	1.11		1.30			+
control Delay (s/veh)		18.8	34.5	-	15.6	-		+
OS		C			+			+
			D		С			
pproach Delay (s/veh)				20.2				
pproach LOS				С				

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REDUCED SITE SURVEY & AERIAL



Tom Thumb



Monroe County Property Appraiser
500 Whitehead Street
Key West, FL

PALMIS

DISCLAIMER: The Monroe County Property Appraiser's office maintains data on property within the County solely for the purpose of fulfilling its responsibility to secure a just valuation for ad valorem tax purposes of all property within the County. The Monroe County Property Appraiser's office cannot guarantee its accuracy for any other purpose. Likewise, data provided regarding one tax year may not be applicable in prior or subsequent years. By requesting such data, you hereby understand and agree that the data is intended for ad valorem tax purposes only and should not be relied on for any other purpose.

Date Created: June 9, 2008 8:41 AM

Legend
Selected Features
Real Estate Number
Parcel Lot Text
Dimension Text
Block Text
Hooks/Lesds
Lot Lines
Essements

Road Centerlines
Water Names
Percels

Shoreline
Section Line
2005 Aarlala

TOM THUMB FOOD STORE, INC.

(LANDCO, LLC)

RE# 00508260-000000

MILE MARKER 104.7

Construction Management Plan and Construction Phasing

Construction will follow best management practices. Site will be fenced with no public access during construction. Straw bales will be used to prevent runoff onto adjoining properties and roadways.

Construction will proceed in a timely manner.

It is estimated that construction will begin within 45 days of approval of the Major Conditional Use Permit and allocation of NROGO credits. The expansion and construction process is expected to take 90 days from beginning to end. If the availability of NROGO credits is not sufficient to construct the entire canopy at one time, the project may be phased into two time periods. If a phased approach is required then the first phase will incorporate replacement of the fuel storage tanks, construction of the new fuel islands and footers for the canopy. Depending on cost considerations and engineering considerations, one of the canopies will be installed during the first construction phase and when the additional NROGO credit are available the remaining canopy will be installed.

January 23, 2009

SENT VIA USPS

Mr. Ed Nicolle, Jr. Florida Keys Aqueduct Authority 1100 Kennedy Drive Key West, FL 33040

Re: "Letter of Coordination"

Dear Mr. Nicolle:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

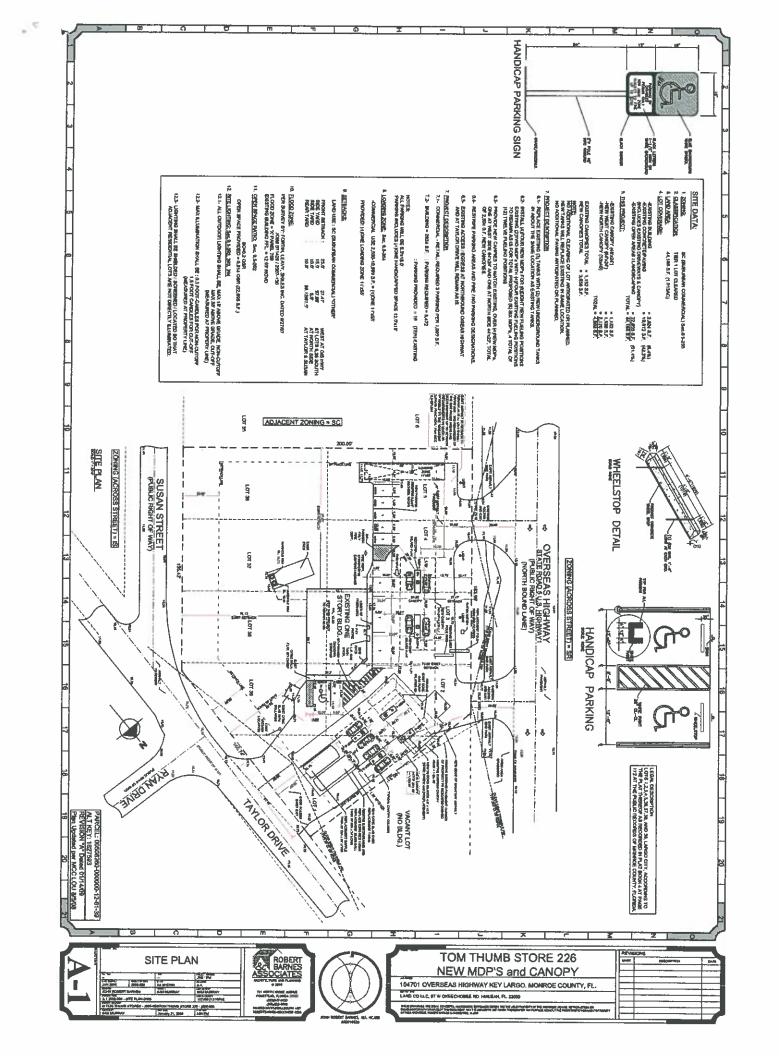
In addition to our upgrades and expansion, we will be looking at ways to reduce our use of potable water and possibly capturing rain water for landscape irrigation at the store so as to minimize our impact on the community.

FKAA has been providing service to the convenience store since 1989 under Customer ID # 513839

Enclosed is a copy of the proposed site plan indicating the location of the new fueling positions.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,



January 26, 2009

Florida Keys Electric Cooperative 91605 Overseas Hwy Tavernier, FL 33070

Re: "Letter of Coordination"

To Whom It May Concern:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39 of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

Enclosed are three copies of the proposed civil plans indicating the location of the new fueling positions.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,

January 26, 2009

SENT VIA USPS

Wally Romero
Assistant Fire Marshal
Monroe County Office of the Fire Marshal
490 63rd Street
Marathon, FL 33050

Re: "Letter of Coordination"

Dear Mr. Romero:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

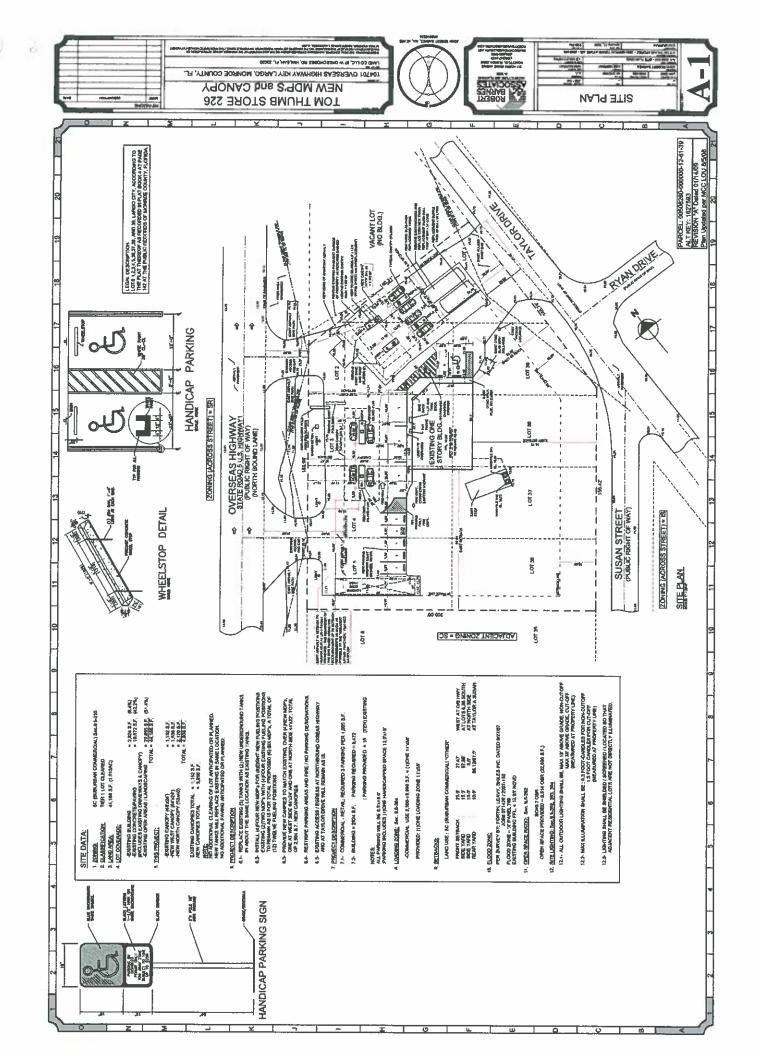
We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39 of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

Enclosed is a copy of the proposed site plan indicating the location of the new fueling positions.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,



January 23, 2009

SENT VIA USPS

David Koppel
County Engineer
Monroe County Engineering Division
1100 Simonton Street, Suite 216
Key West, FL 33040

Re: "Letter of Coordination"

Dear Mr. Koppel:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

Enclosed is a copy of the proposed site plan indicating the location of the new fueling positions and a Project Description.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,

TOM THUMB CONVENIENCE STORE

RE# 00508260.000000

MILE MARKER 104.7

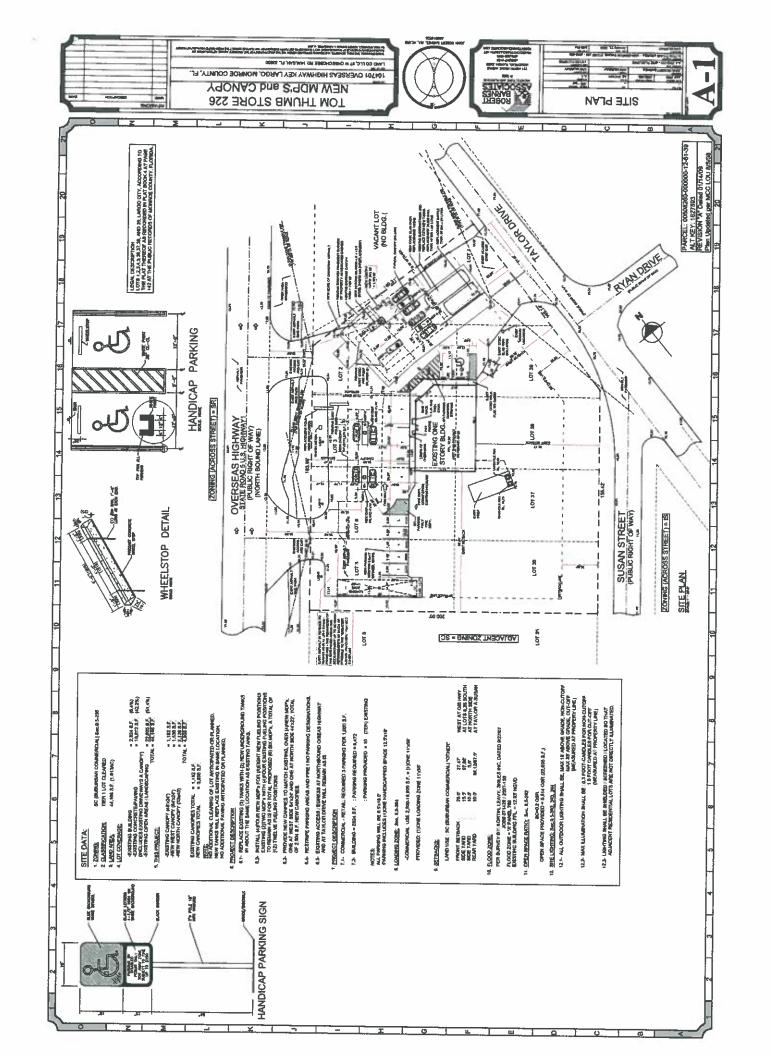
Project Description

This property is owned by LANDCO, LLC and operated under the name of Tom Thumb Food Stores, Inc. Located at 104701 Overseas Hwy., Key Largo, FL. The property consists of 44,166 sq. ft. (1.01 Acres) of total land area and has a zoning classification of Sub Urban Commercial (SC). Located on the property and currently operating is a 2,824 sq. ft. enclosed convenience store and a 1,152 sq. ft. canopy over two (2) fuel pumps.

The proposed expansion project will include the demolition of the canopy that covers the existing fuel pumps and the construction of two (2) new canopies of 1,536 sq. ft. and 2,120 sq. ft. to cover the relocation of the existing fuel pumps and four (4) additional fuel pumps. The final expansion will have a total of six (6) fuel pumps and a retro fit/ upgrade to the convenience store.

A Major Conditional Use Permit application is being submitted to the Monroe County Growth Management Department for the above detailed expansion.

Also included in the expansion will be an upgrade of the landscaping and onsite traffic flow patterns. The expansion and upgrades will include where ever possible, the use of energy efficient lighting and equipment and the uses of low flow restroom fixtures.



January 26, 2009

SENT VIA USPS

Mike Winkler

Monroe County Environmental Health Department
50 High Point Road, Suite 104

Tavernier, FL 33070

Re: "Letter of Coordination"

Dear Mr. Winkler:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

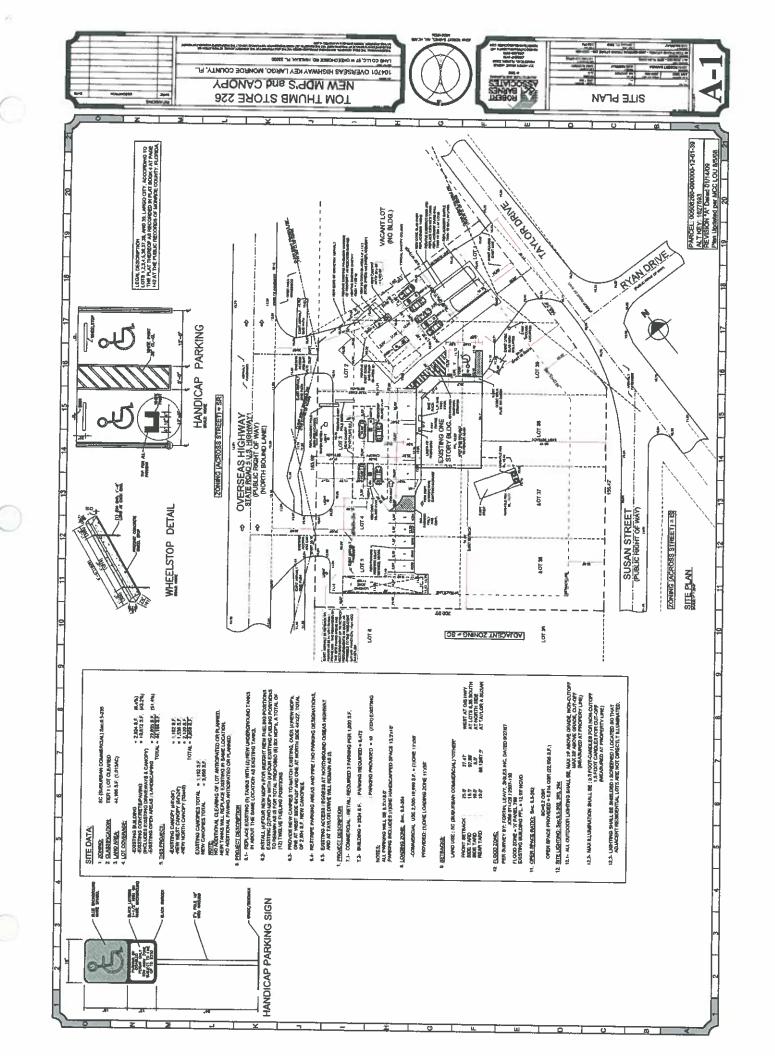
We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

Enclosed is a copy of the proposed site plan indicating the location of the new fueling positions.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,



SENT VIA USPS

Ms. Rosa Washington Senior Administrator Monroe County Solid Waste Management 1100 Simonton Street, Suite 2-231 Key West, FL 33040

Dear Ms. Washington:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion.

We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260.000000.

In addition to our upgrades and expansion, we will be looking at ways to increase our recycling at the store so as to minimize our impact on the community.

Enclosed is a copy of the proposed site plan indicating the location of the dumpsters.

Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,

Douglas Landsea

From: Sent:

Douglas Landsea [dlandsea@hotmail.com]

Monday, January 26, 2009 10:23 AM

To:

'esantisteban@vmsom.com'

Subject: Attachments:

Letter of Coordination (second property)

2009 SITE PLAN STORE 226 pdf

January 26, 2009

Florida Department of Transportation

Re: "Letter of Coordination"

Dear Ernesto:

As the representative of the owner (LANDCO, LLC) of the property commonly known as the Tom Thumb Food Store, Inc. located on the East side of the Overseas Hwy. at Mile Marker 104.7 on Key Largo, Monroe County, Florida, we request from your office a "Letter Of Coordination" for the following expansion. We are in the process of seeking a Major Conditional Use Permit approval from the Monroe County Planning Commission and thereafter building permits from the Monroe County Building Department for the construction of four additional new fueling pumps and accompanying canopy.

The existing convenience store building will remain the same size and be upgraded and modernized to provide a more friendly and convenient shopping experience. The business has been owned by Tom Thumb since 1989. The property is legally described as Block 1, Lot 1-5 and 36-39of Largo City subdivision (PB4-142) and having a Real Estate number of 00508260,000000.

Enclosed is a copy of the proposed site plan indicating the location of the new fueling positions. Please contact me if you require additional information (305-298-1022) and I thank you for your assistance in this matter.

Sincerely,

Douglas Landsea

LANDSEA

DEVELOPMENTS, LLC

305-298-1022 (C)

305-468-6245 (F)

KEYS ENGINEERING SERVICES, INC.

86801 Overseas Highway Islamorada, Florida 33036 Daryle L. Osborn PE #27428

Storm Water Management Plan Tom Thumb Store 226

Project Description: A new MPD's and canopy with paved areas.

Project Location: Tom Thumb Store 226 is located on Key Largo,

Florida at 104701 Overseas Highway.

Existing Site Conditions:

Vegetation: The existing site is approximately 39% paved and

built on. The increased area is 6,779 (15%).

Soils: The area is scrub grass over pervious oolite rock in

the non developed areas. The water table was not

encountered at 4'0" below existing grade.

Flood Plan & **Elevations:**

The proposed construction is in Flood Zone "X".

The overall site elevation is between 9' to 11'

MSL.

MI/21/09

Storm Water Management Plan

Site Data:

Net Area = 44,166 square feet

Impervious Areas

Existing Building = 2,824sf Existing Concrete/Paved Areas = 19,872sf

Total = 22,696sf

Percent Pervious = 48.6%

Pre / Post Development Runoff:

- 1. Compute Predevelopment Runoff
 - a. Depth to Groundwater = Greater than 4.0'
 - b. Soils Storage (C-111-3) = 8.18 inches
 - c. P = 8.5 inches

$$Q = (P - .2S)^{2} / (P + .8S)$$

$$P = 8.5$$

$$S = 8.18$$

$$Q = 3.13 \text{ inches}$$

- 2. Compute Post-development Runoff
 - a. Soils Storage (C-111-3) = 8.18 inches
 - b. P = 8.5 inches
 - c. Percent Pervious = 48.6%

Q =
$$(P - .2S)^2 / (P + .8S)$$

P = 8.5
S = .486 x 8.18 = 4.0
Q = 5.07 inches

3. Limit Post to Pre development Runoff Storage Required:

$$5.07 - 3.13 = 1.94$$
 inches

$$1.94 \times 44,166 / 12 = 7,140$$
 cubic feet to retain

Volume of Water to be Treated:

The storm water runoff will be maintained on site by dry retention methods. Refer to the site drainage plan for location and sizes of the swale areas.

Swale Area A - 720 cf Swale Area B - 7,350cf French Drain - 840cf

The total volume of retention is 8,910 cubic feet. This exceeds the required 7,140 cubic feet.

Water Quality:

The volume of water to be treated and controlled is ½ inch initial runoff:

$$0.5 \times 44,166 / 12 = 1840$$
 cubic feet

The existing site condition is scrub grass which filters the surface water runoff.

25 Year Storm:

A 25 year storm over a 24 hour period in South Florida will average 1.05 inches of rainfall per hour. The initial wash calculations used a rate of 1.94 inches per hour. The initial wash calculations are worst case and will govern.

$$1.05 \times 44{,}166 / 12 = 3{,}864$$
 cubic feet

